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ABSTRACT

The current status of banks of test items existing across the United States was determined through a survey conducted between September and December 1987. Item "bank" in this context does not imply that the test items are available in computerized form, but simply that "deposited" test items can be withdrawn for use. Emphasis was on documenting the sources of test items in the various subject areas that respondents considered to measure higher order thinking skills. Complete copies of the 41 Item Bank Data Sheets that were returned are included to describe item banks maintained by state or regional agencies (46% of the respondents), commercial ventures (33%), and school districts (20%). Most item collections contain basic skills items for reading, language arts, and math, but many are branching into science and the social sciences. Progress made in item banking in the last few years appears likely to increase with the development of better hardware and software. (SLD)

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A Guide to Item Banking in Education

(Third Edition)

Item Bank Data Sheets

Richard W. Naccarato

Test Center
Northwest Regional Educational Laboratory
101 S.W. Main, Suite 500
Portland, Oregon 97204

January 1988

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TABLE: Summary of Item Bank Survey Respondents 3

1. INTRODUCTION

This document contains the results of a survey conducted between September and December, 1987 which was intended to describe the current status of existing item banks across the U.S. In addition to describing the banks of test items that exist, there are several questions concerning the computer software and data management systems which accompany these item collections. This survey is an update of a previous one conducted by Estes and Arter (1984).

In addition to compiling more recent information on existing item banks, one of the primary purposes of this update was to document, in particular, the sources of test items in the various subject areas which respondents considered to measure "higher order thinking skills." For this reason Higher Order Thinking Skills was added as a special content area within each of the requested subject areas. Also, question number 8 requested particular information on the cognitive level categorizations of test items within the various item collections. Several other specific questions were asked concerning the types and capabilities of computer software used.

The survey respondents are categorized into three mutually exclusive sections:

1) those organizations which stated that they had collections of test items and pre-constructed tests available for sale or free, or the acquisition of which could be arranged with the organization;

2) those organizations which stated that they had only pre-developed tests available for sale or free, or would construct tests from their item collections;

3) remaining organizations which have collections of test items or tests that are proprietary to their organizations but who may be willing to share information or experiences concerning their testing programs.

Within each of these three sections the surveys are organized in alphabetical order by *name of organization*.

For this report the term "item bank" is to be thought of as being synonomous with "item collection" or "item pool." We use the term "bank" to mean that individual items have been "deposited" and can be "withdrawn" at some later date. This definition does not imply that the items be available in computerized form (which is still in a rather developmental stage for the most part) or that there are any particular kinds of statistics associated with the items.

2. THE SAMPLE

Having had substantial prior experience at surveying the existence of item banks nationally, this sample would have to be typified as purposive in nature. Each state in the nation did receive *Item Bank Data Sheets* with a request to send the forms to relevant sources within their state whether or not the state itself maintained an item bank. In addition to these 50 surveys another 60-70 were distributed to:

1) sources who had responded to the survey in 1984;

2) sources who we knew through the literature maintained item banks; and

3) sources who we found by "word of mouth" to have been maintaining banks of test items.

It is most probable that any omissions from this survey were due to a lack of response of those surveyed. At this time the percentage of non-respondents who we suspect *actually do have* item banks is somewhere between 10-20% of those surveyed. About 15% of those respondents who claimed to have item banks in 1984 said that the banks no longer existed or were active in 1987.

3. CAUTIONS TOWARD USING THIS GUIDE

Even though organizations have voluntarily submitted the Item Bank Data Sheets and information to us, many of the organizations are hesitant to share the item banks with other agencies, or will do so with some negotiation or cost involved. Even if the item banks are said to be free of cost, the duplication costs themselves can sometimes be considerable, so a requestor should offer to cover these costs. We would suggest that an interested party should contact the item bank source by phone first in order to assess the necessary procedures for obtaining the bank(s) and any costs involved. Please assess your own precise needs for items in advance of contacting the source, rather than simply asking for copies of "everything they've got."

4. CATEGORICAL CLASSIFICATIONS

As mentioned previously, the three sections within this document were based upon whether the responding organization claimed to have available test items, intact tests, computer software or combinations of these three items. Additionally, we were keenly interested in whether the organization responded as having items measuring "higher order thinking skills" -- a categorization whose definition was left to the respondent. The table below lists alphabetically all survey respondents (across all three sections), the type of organization responding, and the general categorical responses to the availability of test items, intact tests or item banking computer software.

TABLE: SUMMARY DATA ON ITEM BANK SURVEY RESPONDENTS

NAME OF ORGANIZATION	BANK TITLE	ORG* TYPE	ITEMS	HOTS	TESTS	SOFTWARE
Academic Hallmarks	KnowledgeMaster	C	X		X	X
Alabama State DOE	AHSGE	S			X	
Alaska State DOE	AOIB	S	X		X	
American Guidance Services		C	X		X	
Assurance, Inc.	Assure I	C	X	X	X	X
California DOE	Sample Assess Exer.	S	X			
Clark County, NV S.D.		S		X		X
Connecticut DOE	Conn Mastery Tests	S	X		X	X
CTB-McGraw Hill	CTB Item Bank	C	X	X	X	X
Dallas Indep. S.D.	Survey Essen. Elem.	D	X	X	X	X
Detroit Pub. Schools	DET Assess. Basic	D		X	X	
Dist. of Columbia Schools	End-of-Course	D			X	X
Florida State DOE		S			X	
Instit. for Educ. Research	IER CRTs	C	X	X	X	X
Maryland State DOE	Mary.Funct.Tests	S			X	X
Michigan State DOE	MEAP	S	X	X		
Minnesota State DOE	Minn. Item Bank	S	X	X		X
Mississippi State U	PREPS, Inc.	S		X		
Missouri State DOE		S			X	
Multnomah ESD, Portland, OR		S	X			X
Nat. Assess. Educ Progress	NAEP/ETS Bank	C	X	X		
North Carolina DPI		S	X			X
Northwest Eval. Assoc.	NWEA Basic Skills	C	X	X	X	X
Northwest Eval. Assoc.	NWEA Science Bank	C	X	X		
Northwest Reg.Educ Lab	NWREL Item Bank	C	X			
Pennsylvania DOE	Penn Ed Qual Assess	S			X	
Psychological Corps, Inc.	AIMS Bank	C	X	X		X
Richardson Indep S.D., TX	RAM Item Bank	D	X	X		X
Riverside Pub. Co.	MultiScore	C		X	X	
Saginaw, MI S.D.	Essen. Skills Test	D	X		X	X
Santa Clara Cnty, CA	ACE	S	X	X	X	
Scholastic Testing		C		X	X	
Science Research Assoc	SRA Item Bank	C	X	X	X	
South Carolina DOE		S		X	X	
TESCOR, Inc.	FNIB	C	X	X		X
Univ. of Kansas	Kan.Min.Comp.Test	S	X		X	X
Wash. Township, Indy, IN		D		X		
West Palm Beach, FL		D	X			X
Wisconsin DPI	DPI Item Bank	S		X	X	X
Wyoming State DOE	WY Clrnghse Basic	S		X		
Yakima, WA S.D.		D	X	X		

* S = state or county department C = commercial organization D = school district

An organization has an "X" in the table under Items?, Tests?, or Software? only if they stated that these were available from them either for a price, upon negotiation or for free; in some cases, the computer software was said to be available, but through an outside vendor. The "HOTS" category will have an "X" if the organization specifically stated that items measuring "higher order thinking skills" were part of their collection, whether or not these items were available from the organization. We were specifically interested in the proportion of item collections which were purported to contain HOTS items.

5. OVERVIEW OF FINDINGS

Since complete copies of the surveys are included in this document we will not elaborate upon their content; however we will attempt to give some generalized impressions of the summarized findings. In reflecting upon the table displayed in the previous section of this report, it appears that the following observations can be made:

1) the type of organizations that responded as having item collections break out as:

   - about 46% being state or regional agencies;
   - about 33% being commercial ventures; and
   - about 20% being school districts

2) around 60% of the respondents claimed to have items measuring higher order thinking skills (HOTS) within their item collections or as part of their intact tests.

3) about 50% of the respondents also had item banking software of some sort available either from them or from an outside vendor; much of this software is the commonly available packages (Wordstar, dBase III, etc.) and is not specifically designed for item banking, test construction, scoring and the like.

Computer software for the "banking" of test items, building of tests and data management of item and student data is very much in the developmental stages as of this time, though considerable gains seem to have been made since the previous report in 1984. Software which will handle the entire spectrum of test development, scoring, etc. is quite rare and usually resides within commercial testing ventures. Software which can handle the integration of test item graphics with the item text and generate the complete test pages via computer are extremely rare. Some packages that seem to be approaching this standard are those reported by TESCOR, AIMS, Assure I, CTB, Multiscore, and the Minnesota Item Bank as examples. Note that nearly all such examples are in the commercial testing business.

Nearly all respondents stated that they had their items classified by content and general objective category; a vast majority of these respondents had provided a content review and validity matching of the items to objectives. About 80-90% of those responding also kept item statistics for the test items in their bank -- at least difficulty indices (p-values) and, in a *majority* of cases, latent trait or item response data as well.

Though a vast majority of the item banks had the items classified by objectives to be measured, and were able to retrieve items from the bank by objective, only about 25% of the respondents indicated that they could retreive items by *cognitive level.*

Most of the item collections available contain basic skills items (reading, language arts and math), however a growing number are branching into other subject areas as well. A usual progression after the basic skills seems to be branching into the science areas next and social sciences shortly thereafter. Between 25-30% of our respondents said that they had items in Science and/or Social Studies as well as in the basic skills areas previously mentioned. Other subject areas in which two or more respondents had test items are: consumer/life skills, fine arts, citizenship and health/career -related areas.

6. FUTURES OF ITEM BANKING

Many of the survey respondents indicated that the development of their item banks was ongoing, especially the development of software materials. As mentioned earlier, few organizations stated that they had complete test development and banking software -- primarily the commercial test companies. And as we have tested and observed the operation of several of these (complete) systems, there seems to always be room for improvement and further development. The problem of generating and integrating graphics for test items seems to be getting nearer to being solved with the sophistication of software packages (such as desktop publishing packages). However, the ever-evolving hardware situation, especially in the microcomputer arena, will need to keep pace and be coordinated with the appropriate software if there is to be any universal or standardized use of item banking packages.

It is clear that the "banking" of test items and computer generation of tests is not a useful (or cost-effective) endeavor for all test users. However, anyone who has attended regional or national educational research conferences knows that this issue ranks toward the top in current interest for many users, and will be here to stay over the next few years. It also seems that the progress made over the past three years or so is bound to be quadrupled over the next few years with hard- and software development. We would predict that there should be several fine, complete item banking, test development packages available to choose from in just a very few years to come.

7. BIBLIOGRAPHY

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Millman, Jason & Arter, Judith A. Issues in item banking. Journal of Educational Measurement, 21, No. 4, Winter, 1984.

Estes, Gary D. and Arter, Judith A. A Guide to Item Banking in Education (2nd Edition). Northwest Regional Educational Laboratory, 100 S.W. Main, Suite 500, Portland, Oregon 97204, 1984.

Estes, Gary D. & Arter, Judith A. Item banking for state and local test-development and use -- Specific guidelines for local practitioners. Northwest Regional Educational Laboratory, 1983.

SECTION A

ITEMS AND/OR TAILORED TESTS AVAILABLE

Academic Hallmarks

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Knowledge Master

For information about the bank contact:

Name Robert Sauer
Title Vice President
Organization Academic Hallmarks
Street P.O. Box 998, #5 Woodland(Suite B)
City Durango **State** CO **Zip** 81301
Phone: Area code 800 **Number** 321-9218

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☐ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☐ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☒	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other

Intent of bank is primarily as study and for students and general resource for schools

6 **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension									
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills									
	Concepts						x	x		
	Problem Solving (Application)		2000				x	x		
	Geometry						x	x		
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar						x	x		
	Usage		4800				x	x		
	Mechanics						x	x		
	Shakespere ~~Foreign Language (specify:~~ ______)									
	Mythology Composition									
	Higher Order Thinking Skills									
	Literature						x	x		
	Fine Arts 800						x x	x x		
	Economics and Law 800						x	x		
	Sports & PE 800									
	Vocational 800 Current events 400						x	x		
	American History 2000						x	x		
OTHER	World History 1600						x	x		
	Geography 1600 Health 800						x	x		
	Physical Sciences 2000						x	x		
	Earth Science 2400 Biology 2000						x	x		

12 800 Sholt answer questions for academic competitions ---]6,000

7. Which of the following can be used to retrieve items? (Check all that apply)

☐ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☒ other discipline
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________
☐ modified an existing taxonomy, please list ____________
☐ developed our own cognitive taxonomy
☐ other ____________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☐	☐	☐
item graphics	☐	☐	☐	☐
item statistics	☐	☐	☐	☐

APPLE II + IIe disks

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☒ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☒ on-line test administration
☐ other ____________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ____________
☒ specially designed for our system by Academic Hallmarks
☐ purchased from test or research organization ____________

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☒ full-screen editing
☒ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ____________

d. If your software handles test development, indicate its capabilities below:

☒ on-line generation of tests
☐ can use various criteria for selecting items
☑ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☑ prints tests
☐ has special print features
☐ will print multiple forms
☐ other

e. If your software handles scoring, please indicate its capabilities below:

☐ mark sense reader
☐ subtest and total scores
☐ objective mastery
☐ item statistics
☐ test statistics
☐ other

f. If your software handles reporting, please indicate its capabilities below:

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Apple II + IIe

j. What is the name of your item banking/test scoring software package?

In-house developed

k. Is your software:?

☒ available on exchange agreement
☒ available for purchase from vendor
☑ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software? *

27/disk of 400 questions

Discounts for series purchases

m. Technical assistance in running the software is:

☑ available from us
☐ available through vendor
☐ not available

Very infrequently necessary

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Catalog sent upon request.

*$27 for 400 Questions
$21 when Series purchased/Per Disk
$16 per disk when library purchased

Alaska State DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Alaska Objective and Item Bank AOIB
This bank will not be maintained beyond this year

For information about the bank contact: also
Mike Hiscox
Interwest Applied Research
4875 S.W. Griffith Dr.
Beaverton, OR
(503) 641-2100

Name Alexander B. Hazelton
Title Educational Administrator
Organization Alaska Department of Education
Street P.O. Box F, 801 W. 10th Street
City Juneau **State** Alaska **Zip** 99811
Phone: Area code 907 **Number** 465-2841

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☒ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☐ developed by teachers
- ☐ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☐ content review to establish appropriate grade levels or age levels
- ☐ editing for clarity
- ☐ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☒	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☐	☒	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☒	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ______

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	33	210		x	x	x			
	Structural Analysis	12	120		x	x	x			
	Vocabulary	17	164		x	x	x			
	Comprehension	38	360		x	x	x			
	Reading Readiness	44	200		x	x	x			
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	100	400		x	x	x			
	Concepts	89	330		x	x	x			
	Problem Solving (Application)	13	660		x	x	x			
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify: ______)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

These are the items that are already in text format. There is about another 4000 items that are in a Diagnostic format.

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other ______________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ______________________
☐ modified an existing taxonomy, please list ______________________
☐ developed our own cognitive taxonomy
☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☐	☐	☐
Item graphics	☒	☐	☐	☐
Item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.) Not any more

a. What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ______________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ______________________
☐ specially designed for our system by ______________________
☐ purchased from test or research organization ______________________

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ______________________

d. **If your software handles test development, indicate its capabilities below:**

☐ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☐ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________
____
____

e. **If your software handles scoring, please indicate its capabilities below:**

☐ mark sense reader
☐ subtest and total scores
☐ objective mastery
☐ item statistics
☐ test statistics
☐ other ____________
____
____
____

f. **If your software handles reporting, please indicate its capabilities below:**

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other ____________
____
____
____
____

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________
____
____

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

____
____
____
____

j. What is the name of your item banking/test scoring software package?

____
____
____
____
____
____

k. Is your software:?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software?

____
____

m. Technical assistance in running the software is:

☐ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Assurance, Inc.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Assure I Test Item Bank

For information about the bank contact:

Name Robert O. Armstrong
Title President
Organization Assurance, Inc.
Street 2455 E. Speedway, Suite 203
City Tucson **State** AZ **Zip** 85719
Phone: Area code 602 **Number** ____

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

Refer to letter and enclosed materials

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization (with some local district assistance)
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☒	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☐	☒	☐	assistance in interpreting test data

other ____

6 **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	33	330		x	x	x	x		
	Structural Analysis	62	620		x	x	x	x		
	Vocabulary (word meaning and Recog.)	60	600		x	x	x	x		
	Comprehension	178	1780		x	x	x	x		
	Reading Readiness	34	340	x	x					
	Reference (Study) Skills	88	880		x	x	x	x		
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	127	1270		x	x	x			
	Numeration Concepts/Numbers	143	1430		x	x	x			
	Problem Solving (Application)	56	560		x	x	x			
	Geometry	48	780		x	x	x			
	Measurement	51	510		x	x	x			
	Probability/Statistics Higher Order Thinking Skills	10	100				x			
	Algebra	138	552							
LANGUAGE ARTS	Grammar Skill lists breakdown	366	3660		x	x	x	x		
	Usage into domains of parts of speech, capitalization									
	Mechanics punctuation, sentence structure and usage									
	Foreign Language (specify: ______)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE	Grades 1 - 8	530	4615		x	x	x			
	Physics/Chemistry/Biology	300	1500					x		
	Higher Order Thinking Skills									
OTHER	Social Studies	473	4730			x	x	x		
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested
- ☐ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☒ key words
- ☐ other____________________
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ____________________
- ☐ modified an existing taxonomy, please list ____________________
- ☐ developed our own cognitive taxonomy
- ☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☒	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☐	☐	☐	☒ See letter

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ item management
- ☒ test development
- ☒ scoring
- ☒ reporting
- ☒ student recordkeeping
- ☒ cross-reference to materials
- ☐ on-line test administration
- ☐ other ____________________

b. From where did you obtain this software?

- ☒ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using

Only to a small extent

using Word Star

- ☒ specially designed for our system by ____________________
- ☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☒ full-screen editing
- ☒ can add/delete/change items
- ☒ can add/delete/change item classifications
- ☐ will handle user history
- ☒ will handle test analysis
- ☐ other____________________

d. If your software handles test development, indicate its capabilities below:

☒ on-line generation of tests
☒ can use various criteria for selecting items
☒ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☒ prints tests
☒ has special print features
☒ will print multiple forms
☐ other ______

e. If your software handles scoring, please indicate its capabilities below:

☒ mark sense reader
☒ subtest and total scores
☒ objective mastery
☒ item statistics
☒ test statistics
☐ other Has built in reliability package as well as optional item analysis

f. If your software handles reporting, please indicate its capabilities below:

☒ subtest profiles--student
☒ subtest profiles--class
☒ summary reports
☒ cross reference to materials/methods
☐ other ______ open system -- user adds own presciptions

g. If your software handles student recordkeeping, please indicate its capabilities below:

☒ by objective mastered
☒ total scores over time
☒ gradebook or series of scores
☐ other ______

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM XT/AT or compatible
(Compaq, Tandy, etc)
Rec 640 K, 10-20
Meg. Harddisk

j. What is the name of your item banking/test scoring software package?

ASSURE I Test Item Bank
ASSURE II Test Scoring
ASSURE III Test Reliability
ASSURE III Longitudiral Student Rec.
ASSURE III Open Instructional
Prescription Data Base

k. Is your software:?

☐ available on exchange agreement
☒ available for purchase from vendor (Commercial programs used)
☒ available for purchase from you
☐ not available for others

*Word Star, etc.

l. What is the approximate cost of your testing software?

See enclosed price structure

m. Technical assistance in running the software is:

☒ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Note: List of item bank objectives scoring feedback reports, etc., available upon request.

California DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Sample Assessment Exercises Manual (2 Volume): Elementary and Secondary

For information about the bank contact:

Name William L. Padia
Title Administrator, Special Studies
Organization California Dept of Education
Street 721 Capitol Mall
City Sacramento **State** CA **Zip** 95814
Phone: Area code 916 **Number** 445-0297

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ____________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis	6	19				x	x		
	Vocabulary	6	90				x	x		
	Comprehension	10	183				x	x		
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	21	84				x	x		
	Concepts	15	60				x	x		
	Problem Solving (Application)	15	60				x	x		
	Geometry	7	28				x	x		
	Calculator Math None									
	Expressions, Equations & Formulas	12	60				x	x		
	Measurement	9	36				x	x		
	Interpreting Tables & Graphs	8	36				x	x		
LANGUAGE ARTS	Grammar (word forms)	2	81				x	x		
	Usage (sub/verb & pronoun agrmt.)	2	21				x	x		
	Mechanics (punct./capit.)	5	52				x	x		
	Foreign Language (specify:)									
	Composition (sentences;paragraphs	7	95				x	x		
	Higher Order Thinking Skills spelling	10	17				x	x		
	Direct Assessment of Writing:									
	Holistic Scoring Guides	3	3				x	x		
SCIENCE	Consumer/Basic Life Skills	5	362				x	x		
	(Functional Transfer)									
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☒ cognitive level (e.g., recall, inference)
☐ key words
☐ other ____________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________________
☐ modified an existing taxonomy, please list ____________________
☐ developed our own cognitive taxonomy
☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ____________________
☐ specially designed for our system by ____________________
☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ____________________

d. **If your software handles test development, indicate its capabilities below:**

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ______________

____

____

e. **If your software handles scoring, please indicate its capabilities below:**

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ______________

____

____

____

f. **If your software handles reporting, please indicate its capabilities below:**

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ______________

____

____

____

____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ______________

____

____

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

____

____

____

____

j. What is the name of your item banking/test scoring software package?

____

____

____

____

____

____

k. Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

____

____

m. Technical assistance in running the software is:

- ☐ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

CTB-McGraw-Hill

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) CTB/McGraw-Hill Item Bank

For information about the bank contact

Name Arnold W. Seibel
Title Item Bank Manager
Organization CTB/McGraw-Hill
Street 2500 Garden Road
City Monterey State CA Zip 93940
Phone: Area code 408 Number 649-7762

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ■ test items
- ■ classification of items by content
- ■ general objectives or topic statements
- ■ item specifications, detailed content descriptions, etc.
- ■ suggested instructional activities (some objective sets)
- ■ cross references between objectives and appropriate instructional materials " " "
- ■ content review or other validity information (some item pools)
- ■ reliability estimates " " "
- ■ p-values " " "
- ■ IRT (latent trait) calibrations " " "
- ■ other item analysis data " " "
- ■ technical reports " " "

2. What is the source of the bank's objectives and items? (check all that apply)

- ■ developed by teachers
- ☐ developed by state or local central office staff
- ■ developed by test development personnel within your organization
- ■ developed by an outside organization
- ■ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ■ review to verify appropriate content
- ■ content review to match items to objectives
- ■ content review to establish appropriate grade levels or age levels
- ■ editing for clarity
- ■ editing based on reviews by technical personnel
- ■ editing based on technical data
- ■ review for sex bias (some item pools)
- ■ review for cultural and ethnic bias (some item pools)
- ■ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results) (some item pools)
- ■ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration) (some item pools)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
■	☐	☐	all or most of the bank is available for sale
☐	☐	■	all or most of the bank is available free (or for cost of reproduction)
☐	■	☐	pre-developed tests are constructed from the item bank
■	☐	☐	tests are constructed based on objectives in the item bank selected by the user
■	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
■	☐	☐	printing of test materials
■	☐	☐	test scoring services
■	☐	☐	development of individual student profiles
■	☐	☐	development of class and school profiles
☐	■	☐	training on test administration procedures
☐	■	☐	training on writing or selecting objectives and item specifications
☐	■	☐	training on writing test items
■	☐	☐	assistance in interpreting test data

other Matching sets of objectives

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

** Item totals are approximate as of early 1988. New items are added continually. **

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	PLEASE SEE	700	X	X	X	X			
	Structural Analysis	NARRATIVE	400		X	X	X	X		
	Vocabulary	REGARDING	2800	X	X	X	X	X		
	Comprehension	OBJECTIVES	3100	X	X	X	X	X		
	Reading Readiness (vis. discrim., word ID)		200	X	X	X				
	Reference (Study) Skills		1100		X	X	X	X		
	Higher Order Thinking Skills PLEASE SEE NARRATIVE									
	Oral (Listening) Comprehension		100	X	X					
	** Spanish to be added in 1988.									
MATHEMATICS	Computational skills		3200	X	X	X	X	X		
	Concepts (not geometry)		1600	X	X	X	X	X		
	Problem Solving (Application) (not geom.)		2200	X	X	X	X	X		
	Geometry (concepts & application)		800	X	X	X	X	X		
	Calculator Math (none so specified)									
	Higher Order Thinking Skills PLEASE SEE NARRATIVE									
	Problem Solving (Methods)		300	X	X	X	X	X		
	** Spanish to be added in 1988.									
LANGUAGE ARTS	Grammar		1100	X	X	X	X	X		
	Usage		1700	X	X	X	X	X		
	Mechanics		2000	X	X	X	X	X		
	Foreign Language (specify:)									
	Composition (not writing prompts)		700		X	X	X	X		
	Higher Order Thinking Skills PLEASE SEE NARRATIVE									
	** Spanish to be added in 1988.									
SCIENCE	General, Life, Earth, Physical		600		X	X	X	X		
	Higher Order Thinking Skills PLEASE SEE NARRATIVE									
OTHER	Social Studies		800	X	X	X	X	X		
	Higher Order Thinking Skills PLEASE SEE NARRATIVE									

7. Which of the following can be used to retrieve items? (Check all that apply)

■ objective to be tested
☐ item difficulty
■ item type (e.g., multiple-choice)
■ cognitive level (e.g., recall, inference)
■ key words
■ other Please see narrative.
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________
☐ modified an existing taxonomy, please list ____________
■ developed our own cognitive taxonomy
■ other Please see narrative.

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	■	■	☐	☐
item graphics	■	■	☐	☐
item statistics	☐	☐	☐	■

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

■ item management
■ test development
■ scoring
■ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using
■ specially designed for our system by Data Guide Systems
☐ purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

■ stores items
■ full-screen editing
■ can add/delete/change items
■ can add/delete/change item classifications
☐ will handle user history
■ will handle test analysis
☐ other ____________

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d. If your software handles test development, indicate its capabilities below:

■ on-line generation of tests
■ can use various criteria for selecting items
■ can add/delete/change items that are computer selected
■ automatically stores answer keys
■ prints tests
■ has special print features
■ will print multiple forms
☐ other ____________

e. If your software handles scoring, please indicate its capabilities below:

■ mark sense reader
■ subtest and total scores
■ objective mastery
■ item statistics
■ test statistics
☐ other ____________

f. If your software handles reporting, please indicate its capabilities below:

■ subtest profiles--student
■ subtest profiles--class
■ summary reports
☐ cross reference to materials/methods
☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

■ can generate most graphics
■ can attach external graphics to item text
■ can generate graphics and merge them in with item text
■ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

AT 286 compatibles

j. What is the name of your item banking/test scoring software package?

TEST BUILDER
- item management
- test development
TEST MATE
- scoring
- reporting

k. Is your software:?

☐ available on exchange agreement
☐ available for purchase from vendor
■ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software?

TestBuilder $1600
TestMate $2600 (CRT)

m. Technical assistance in running the software is:

■ available from us
■ available through vendor
☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

CTB/McGraw-Hill Item Banking Products and Services

CTB/McGraw-Hill's Item Bank provides both centralized, mainframe-computer based and distributed, microcomputer-based products and services. These are described separately below. Specific information is available through CTB's nationwide staff of professional evaluation consultants.

Mainframe Item Bank

The Item Bank consists of a relational data base of item characteristics and objective definitions. The data base is linked to other systems that store the text, graphics, and statistics needed to use the items.

The Item Bank does not categorize items according to a single, arbitrary list of objectives. Rather, it describes both items and objectives in terms of a uniquely flexible and expandable internal language. Any set of objectives defined in this language becomes an integral part of the Item Bank. The objectives are then used to retrieve items directly, in their own terms, without first having to be matched to a set of generic objectives. They can also be matched to other sets of Item Bank objectives for purposes of comparison, prescription, product evaluation, and so on.

The Item Bank retrieval system makes items accessible not only in terms of any set of objectives, but also in terms of:

- specific elements of the internal content-descriptive language
- item format characteristics, such as (depending on content area):
    - number of responses
    - question vs. incomplete-sentence item stem
    - word vs. phrase vs. sentence item responses
- item administration characteristics
    - oral vs. written item stem
    - pictorial vs. verbal item responses
- item calibration history
- reading passage characteristics
    - content
    - format
    - readability
    - focus on female, ethnic, or disabled characters
- graphic display characteristics
    - content
    - format
    - focus on female, ethnic, or disabled characters
- item vocabulary level (data in preparation for selected content areas)
- item usage history (data in preparation)
- cognitive process level (data in preparation)

It is possible to use the Item Bank's internal item-description language to define levels of cognitive processing in terms appropriate to each content area. Elements of the internal language can thus be used to retrieve items for one or more cognitive levels as defined by the user for the purpose at hand; the Item Bank does not enforce a predefined concept of "higher-order thinking skills."

The mainframe Item Bank is used by the professional research and development staff of CTB/McGraw-Hill to create tests and microcomputer-based item banks and to match sets of objectives.

Microcomputer Item Banks

CTB/McGraw-Hill offers item banks for use on microcomputer-based item banking systems. Three types of item banks are available.

1. CTB distributes item banks developed by outside agencies and usable on a variety of microcomputer item banking systems. These item banks retain the content structures provided for them by their originators, which are not necessarily included in the mainframe Item Bank.

2. CTB provides an item bank organized according to a detailed, generic set of objectives that reflects the internal content structure of the mainframe Item Bank. These objectives are defined in sufficiently specific terms to allow easy selection by teachers and evaluators constructing tests according to either classroom instructional objectives or state- or district-mandated test objectives.

   The initial release of this item bank, scheduled for early 1988, includes a comprehensive objective structure and approximately 5,000 items in reading, language, and mathematics. Subsequent updates will expand the objective structure into other content areas and will add items in all content areas.

3. CTB offers microcomputer item banks organized according to the user's objectives. Such item banks offer the greatest possible ease of use, since they make items accessible directly in the user's terms, without the need to translate the user's objectives into the item bank's objectives.

   This service includes definition of the user's objectives in the mainframe Item Bank, where they remain available for subsequent uses, including the expansion of the microcomputer item bank, matching with other sets of Item Bank objectives, and creation of customized tests.

The latter two products -- microcomputer item banks organized according to CTB's or the user's objectives -- are designed to be used with the TestMate series of programs for item bank maintenance, test construction, and scoring, created by Data Guide Systems and distributed by CTB/McGraw-Hill. These software systems are available in a variety of formats, all of which provide automatic generation of scoring keys for use with the Data Guide test building and scoring system. They provide the capabilities to expand or alter the initial objective structure; to add, edit, and delete items; and to add descriptive attributes to items. They run on IBM PC and compatible computers with hard disks. With the addition of graphics scanning and editing hardware and software and the use of a laser printer, they include the capability to store, edit, and print graphic displays and pictorial item responses.

Connecticut DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Connecticut Mastery Test (in development)

For information about the bank contact:

Name Peter Behuniak
Title Director CT Mastery Test Program
Organization CT Department of Education
Street 165 Capital Ave
City Hartford **State** CT **Zip** 06145
Phone: Area code 203 **Number** 566-4008

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. **Which of the following are available through this bank?** (check all that apply)
   - ☒ test items
   - ☒ classification of items by content
   - ☒ general objectives or topic statements
   - ☒ item specifications, detailed content descriptions, etc.
   - ☒ suggested instructional activities
   - ☒ cross references between objectives and appropriate instructional materials
   - ☒ content review or other validity information
   - ☒ reliability estimates
   - ☒ p-values
   - ☒ IRT (latent trait) calibrations
   - ☒ other item analysis data
   - ☒ technical reports

2. **What is the source of the bank's objectives and items?** (check all that apply)
   - ☒ developed by teachers
   - ☒ developed by state or local central office staff
   - ☒ developed by test development personnel within your organization
   - ☒ developed by an outside organization
   - ☐ collected from other sources

3. **What reviews or studies (if any) were performed for the items in the bank?** (check all that apply)
   - ☒ review to verify appropriate content
   - ☒ content review to match items to objectives
   - ☒ content review to establish appropriate grade levels or age levels
   - ☒ editing for clarity
   - ☒ editing based on reviews by technical personnel
   - ☒ editing based on technical data
   - ☒ review for sex bias
   - ☒ review for cultural and ethnic bias
   - ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
   - ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. **Which of these statements are correct for this bank?**

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☒ possible	☐	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. **What additional services related to the bank can be provided?** (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☒ possible	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ______

6. **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis ____									
	Structural Analysis ____									
	Vocabulary ____									
	Comprehension ____	3	15			X	X			
	Reading Readiness ____									
	Reference (Study) Skills ____	3	15			X	X			
	Higher Order Thinking Skills ____	2	12			X	X			
	____									
MATHEMATICS	Computational skills ____	4	16			X	X			
	Concepts ____	8	32			X	X			
	Problem Solving (Application) ____	8	32			X	X			
	Geometry ____	4	16			X	X			
	Calculator Math ____	8	32			X	X			
	Higher Order Thinking Skills ____	4	16			X	X			
	____									
LANGUAGE ARTS	Grammar ____	3	21			X	X			
	Usage ____	3	21			X	X			
	Mechanics ____	2	14			X	X			
	Foreign Language (specify: ____)									
	Composition ____									
	Higher Order Thinking Skills ____	1	5			X	X			
	____									
SCIENCE	____									
	____									
	Higher Order Thinking Skills ____									
OTHER	____									
	____									
	Higher Order Thinking Skills ____									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other ______________________
☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ______________________
☐ modified an existing taxonomy, please list ______________________
☐ developed our own cognitive taxonomy
☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☐	☐
item graphics	☒	☒	☐	☐
item statistics	☐	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☒ test development
☒ scoring
☒ reporting
☒ student recordkeeping
☐ cross-reference to materials
☒ on-line test administration
☐ other ______________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ______________________
☒ specially designed for our system by staff & contractors
☐ purchased from test or research organization ______________________

c. If your software handles item management, indicate its capabilities below:

☒ stores items
☐ full-screen editing
☒ can add/delete/change items
☐ can add/delete/change item classifications
☒ will handle user history
☐ will handle test analysis
☐ other ______________________

d. **If your software handles test development, indicate its capabilities below:**

☒ on-line generation of tests
☒ can use various criteria for selecting items
☒ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☒ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ______

e. **If your software handles scoring, please indicate its capabilities below:**

☐ mark sense reader
☒ subtest and total scores
☒ objective mastery
☒ item statistics
☒ test statistics
☐ other ______

f. **If your software handles reporting, please indicate its capabilities below:**

☒ subtest profiles--student
☒ subtest profiles--class
☒ summary reports
☐ cross reference to materials/methods
☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below:

☒ by objective mastered
☒ total scores over time
☐ gradebook or series of scores
☐ other ______

h. If your software has graphics capabilities, please indicate these below:

☒ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM XT

j. What is the name of your item banking/test scoring software package?

could be custumized

k. Is your software:?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☒ not available for others
currently

l. What is the approximate cost of your testing software?

In development

m. Technical assistance in running the software is:

☒ available from us
☐ available through vendor
☐ not available

11. **Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.**

The first phases of providing computer support have been in the administrative area. Attached material indicates the MTIS software. Also the CT mastery test student scores are provided to each district on floppy disks (Apple APREDOS and IBM MS DOS). The next stage is the development at the item banks to support the wider student applications.

Dallas Indep S.D.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Survey Test of Essential Elements/Learner Standards

For information about the bank contact:

Name Robert P. Grobe and Daniel S. Sheehan
Title Executive Evaluator
Organization Dallas Independent School District
Street 3801 Herschel Dr.
City Dallas State Texas Zip 75219
Phone: Area code 214 Number 522-8220

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☒	☐	☐	someXXXXXXXXX of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ______

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		Pre School (0-4)	GRADE LEVEL (AGE)					
		OBJECTIVES	ITEMS		K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary	45	500		X	X	X	X		
	Comprehension	50	600		X	X	X	X		
	Reading Readiness									
	Reference (Study) Skills	50	550		X	X	X	X		
	Higher Order Thinking Skills (Analysis)	38	458		X	X	X	X		
	Literature	35	380		X	X	X	X		
	Listening Comprehension	12	150		X	X	X	X		
MATHEMATICS	Computational skills	80	900		X	X	X	X		
	Concepts Numeration	20	250		X	X	X	X		
	Problem Solving (Application)	50	570		X	X	X	X		
	Geometry	55	600		X	X	X	X		
	Calculator Math & Computer Literacy	88	1100		X	X	X	X		
	Higher Order Thinking Skills (Logic)	12	150		X	X	X	X		
	Math Sentences	30	320		X	X	X	X		
	Charts, Graphs & Tables	30	350		X	X	X	X		
LANGUAGE ARTS	Grammar	20	100		X	X	X	X		
	Usage	20	100		X	X	X	X		
	Mechanics	20	100		X	X	X	X		
	Foreign Language (specify:)									
	Composition	24	320		X	X	X	X		
	Higher Order Thinking Skills sentence logic	30	360		X	X	X	X		
	Editing	24	300		X	X	X	X		
	Speaking	24	300		X	X	X	X		
SCIENCE	Science	126	1600		X	X	X			
	Health	81	1000		X	X	X			
	Higher Order Thinking Skills									
OTHER	Social Studies	135	1700		X	X	X			
	Higher Order Thinking Skills									

6. (cont')

Content Area	No. Objectives	No. Items	Grade Level K-2	3-5	6-8	9-12
Chemistry	14	200				X
Biology	22	300				X
Physical Science	12	200				X
Physics	10	200				X
U.S. History	16	200				X
American Government	12	200				X
Economics	20	200				X
World History	20	200				X
World Geography	20	200				X
Psychology	15	100				X
Sociology	15	100				X

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other____________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________________
☐ modified an existing taxonomy, please list ____________________
☐ developed our own cognitive taxonomy
☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☐ test development
☒ scoring
☒ reporting
☒ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using
☒ specially designed for our system by
own staff
☐ purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other____________________

d. If your software handles test development, indicate its capabilities below:

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other

e. If your software handles scoring, please indicate its capabilities below:

- ☒ mark sense reader
- ☒ subtest and total scores
- ☒ objective mastery
- ☒ item statistics
- ☐ test statistics
- ☐ other

f. If your software handles reporting, please indicate its capabilities below:

- ☒ subtest profiles--student
- ☒ subtest profiles--class
- ☒ summary reports
- ☐ cross reference to materials/methods
- ☐ other

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☒ by objective mastered
- ☒ total scores over time
- ☒ gradebook or series of scores
- ☐ other

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM Compatible
XT level
10 MB hard disk

j. What is the name of your item banking/test scoring software package?

MONITOR
GRADEBOOK

k. Is your software?

- ☒ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is:

- ☒ available from us on a limited basis
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Instit for Educ. Research

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) IER Criterion-Reference Mathematics Objective and Item Bank
IER Criterion-Reference Language Arts Objective and Item Bank
For information about the IER Writing Skills Bank
bank contact:
Name Sandra Cunningham
Title Research Coordinator
Organization Institute for Educational Research
Street 793 N. Main Street
City Glen Ellyn **State** IL **Zip** 60137
Phone: Area code 312 **Number** 858-8060

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☒ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☐ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☒	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ______

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	25	135		X	X	X			
	Structural Analysis	20	120		X	X	X			
	Vocabulary	12	60		X	X	X			
	Comprehension	30	170		X	X	X			
	Reading Readiness									
	Reference (Study) Skills	20	110		X	X	X			
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	60	300		X	X	X			
	Concepts	30	150		X	X	X			
	Problem Solving (Application)	20	100		X	X	X			
	Geometry	40	150		X	X	X			
	Calculator Math									
	Higher Order Thinking Skills									
	Measurement	10	50		X	X	X			
LANGUAGE ARTS	Grammar }	40	170							
	Usage }									
	Mechanics	15	74		X	X	X			
	Foreign Language (specify:)									
	Composition Multiple choice	8	40		X	X	X			
	Higher Order Thinking Skills									
	Direct writing samples	80	~140 prompts		X	X	X			
	Literature	4	20			X	X			
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested
- ☒ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other ________________
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ________________
- ☐ modified an existing taxonomy, please list ________________
- ☐ developed our own cognitive taxonomy
- ☐ other ________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☐ item management
- ☐ test development
- ☒ scoring
- ☒ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ________________

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using
  Apple Software by
  Dr. John McConnell,
  Glenview, IL
- ☐ specially designed for our system by ________________
- ☒ purchased from test or research organization ________________

c. If your software handles item management, indicate its capabilities below:

- ☐ stores items
- ☐ full-screen editing
- ☐ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other ________________

d. If your software handles test development, indicate its capabilities below:

☐ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☐ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________

e. If your software handles scoring, please indicate its capabilities below:

☒ mark sense reader
☒ subtest and total scores
☒ objective mastery
☒ item statistics
☒ test statistics
☐ other ____________

f. If your software handles reporting, please indicate its capabilities below:

☒ subtest profiles--student
☒ subtest profiles--class
☒ summary reports
☐ cross reference to materials/methods
☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Apple IIe
McConnell $200
(from author)

j. What is the name of your item banking/test scoring software package?

Wordstar -- to produce
tests
McConnell Test
Scoring for scoring

k. Is your software:?

☐ available on exchange agreement
☒ available for purchase from vendor
☐ available for purchase from you
☐ not available for others

(From author)

l. What is the approximate cost of your testing software?

____

m. Technical assistance in running the software is:

☐ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Michigan Educational Assessment Program

For information about the bank contact:

Name Edward D. Roeber
Title Supervisor, Michigan Educational Assessment Program
Organization Michigan Department of Education
Street P.O. Box 30008
City Lansing **State** Michigan **Zip** 48873
Phone: Area code 517 **Number** 373-8393

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc. (in Math and Reading only)
- ☒ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☐ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☒	☐	☐	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank for State of Michigan use
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data
			other

Answers are "yes" for State of Michigan

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension	75	225		X	X	X	X		
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
	New Definition of Reading	Not Approp.	500	(Available in 1989)						
MATHEMATICS	Computational skills	100	500							
	Concepts	100	500							
	Problem Solving (Application)	50	250		Available in 1989					
	Geometry	20	100							
	Calculator Math	40	200							
	Higher Order Thinking Skills	50	250							
	Current Pool	250	1250		X	X	X	X		
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE	Content	60	200		X	X	X	X		
	Process	30	100		X	X	X	X		
	Higher Order Thinking Skills									
OTHER	Health	100	300		X	X	X	X		
	Career Development	100	300		X	X	X	X		
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☒ item type (e.g., multiple-choice)
☒ cognitive level (e.g., recall, inference)
in Mathematics
☐ key words
☐ other ____________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________________
☐ modified an existing taxonomy, please list ____________________
☒ developed our own cognitive taxonomy
☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

for microfiche

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☒ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________________

b. From where did you obtain this software?

☒ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using
Idea Ware
☐ specially designed for our system by ____________________
☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

☒ stores items
☐ full-screen editing
☒ can add/delete/change items
☒ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ____________________

d. If your software handles test development, indicate its capabilities below:

- ☒ on-line generation of tests
- ☒ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☒ automatically stores answer keys
- ☒ prints tests
- ☒ has special print features
- ☐ will print multiple forms
- ☐ other ____________

e. If your software handles scoring, please indicate its capabilities below:

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ____________

f. If your software handles reporting, please indicate its capabilities below

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM Clone

l. What is the approximate cost of your testing software?

$200

j. What is the name of your item banking/test scoring software package?

k. Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

m. Technical assistance in running the software is

- ☐ available from us
- ☒ available through vendor ??
- ☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Minnesota State DOE

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Minnesota Test Item Bank

For information about the bank contact:

Name James R. Olson or Daniel F. Bryan
Title Assessment Specialist
Organization Minnesota Department of Education
Street 550 Cedar Street, 730 Capitol Square Building
City St. Paul State Minnesota Zip 55101
Phone: Area code 612 Number 296-2970

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☐ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☐ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ____________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension									
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills									
	Concepts	PLEASE SEE ATTACHED INDICES								
	Problem Solving (Application)									
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER	Social Studies									
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested
- ☐ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☒ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other __________
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☒ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list __________
- ☒ modified an existing taxonomy, please list Bloom's Taxonomy, 3 categories Knowing, Applying, Integrating
- ☐ developed our own cognitive taxonomy
- ☐ other __________

9. In what form are the following available? (Check all that apply)

	HARD COPY	CD/ROM MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☒	☒	☐
Item graphics	☒	☒	☐	☐
Item statistics	☐	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ item management
- ☒ test development
- ☐ scoring
- ☐ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other __________

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using __________
- ☒ specially designed for our system by MN Dept. of Education
- ☐ purchased from test or research organization __________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☐ full-screen editing
- ☒ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other __________

d. If your software handles test development, indicate its capabilities below:

- ☒ on-line generation of tests
- ☒ can use various criteria for selecting items
- ☒ can add/delete/change items that are computer selected
- ☒ automatically stores answer keys
- ☒ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other

e. If your software handles scoring, please indicate its capabilities below:

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other

f. If your software handles reporting, please indicate its capabilities below:

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☒ can generate graphics and merge them in with item text
- ☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM XT, AT, PS
Model 30

j. What is the name of your item banking/test scoring software package?

Minnesota Test Item Bank

k. Is your software:?

- ☒ available on exchange agreement
- ☐ available for purchase from vendor
- ☒ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

$3,000.00 including
CD/ROM Disk and Software

m. Technical assistance in running the software is:

- ☒ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

THE MINNESOTA ITEM BANK FACT SHEET

1986 - 87 SCHOOL YEAR

COST: Each school district may create six tests free and have them scored free of charge.

Each additional test master costs $20. Scoring costs $.60 per student.

ACCESS: An interactive computerized system is available to school districts utilizing a 300 or 1200 BAUD rate modem. Toll free 800 telephone number is available to districts outside the metropolitan calling area. Metro phone number available to metro districts. Time may be reserved by calling (612) 296-2970.

A paper order form is also available to districts that do not have the necessary computer hardware to access the interactive system.

SCOPE: Currently the bank includes four curricular areas. They are: 1.) Mathematics; 2.) Social Studies; 3.) Science; and 4.) Language Arts including Reading. Grade levels are K - 12, however K - 3 are very short of items because of the nature of the items. We will add two curricular areas each year.

ITEMS: Currently there are over 90,000 items coded to content outlines or indices and coded to one of three cognitive levels. They are all machine scoreable items and primarily multiple choice. They have been acquired from a variety of respected sources across the country, including Minnesota school districts. Some items have been written specifically for our item bank.

FUTURE: Stand alone systems in school districts utilizing CD-ROM. Interactive testing utilizing CD/I or equivilant technology.

COURSES BY CURRICULAR AREA

MATHEMATICS

Primary Elem.
Inter. Elem.
7th & 8th Grade
General Math
Algebra I
Geometry
Algebra II
Advanced Topics

SCIENCE

Elem. Life
Elem. Earth
Elem. Physical
Jr Hi Life
Jr Hi Earth
Jr Hi Physical
Sr Hi Biology
Sr Hi Chemistry
Sr Hi Physics

***SOCIAL STUDIES**

American History
Geography
Political Science
Economics
Sociology
Anthropology
Psychology
World Area Studies

***LANGUAGE ARTS**

Language Comp & Exp.
Mechanics of Lang.
Literature
Speech/Communications
Mass Media
Reading

*Each course is repeated three times in Social Studies and Language Arts and coded Elementary, Junior High or Senior High.

MINNESOTA TEST ITEM BANK
WHAT IS IT, HOW IS IT USED?

The Minnesota Test Item Bank is a computerized collection of a large number of test items in Language Arts, Mathematics, Science and Social Studies. It is organized and indexed so that test items can be easily matched with local district curriculum and instruction. The Bank is designed to allow teachers, departments and school districts to choose test items and develop tests that will measure the extent to which students have learned what has been taught and to use that information to improve instruction.

The organizing structures of the Bank have been designed and developed by discipline committees of teachers and other educators from throughout Minnesota. Paying particular attention to what is now being taught throughout the state, while, at the same time, remaining aware of the probable future instructional trends in the discipline, they have developed comprehensive course outlines which function as indices for the Item Bank. These indices allow users to identify test items appropriate to local curriculum and instruction.

Test items have been collected from a wide variety of sources such as National Assessment, assessment instruments developed by various public and private organizations, and other existing item banks. A number of items have also been developed by Minnesota educators to fulfill the specific needs of the Minnesota Bank. These test items are matched to the appropriate course outlines and entered into a computerized data base.

HOW IS THE ITEM BANK USED?

Because of the Banks flexibility, it can be used in many ways. While its primary purpose is to help educators to create test instruments to measure student progress toward mastery of locally developed curriculum and instruction, and to improve that curriculum and instruction as appropriate, its possible uses are as wide as the creative imagination of the user.

During this, its first year of operation, it is expected that school districts will primarily use the Bank for PER evaluation and for the development of district-wide department examinations. In the future, as access is more broadly available, we believe that it will be used in many other ways.

HOW DOES ONE GAIN ACCESS TO THE ITEM BANK?

At present, direct access is gained through a personal computer and a modem. It is also possible to gain access by paper and pencil requests to the Assessment Section of the Department of Education. To create a test, one reviews the local districts desired instructional outcomes and the specific curriculum, teaching methodology and instructional materials used to teach those outcomes. Utilizing a built-in, interactive program, the technology will allow one to choose a randomly selected group of test items, or to pre-select specific items. The user can then view and edit these items, adding and subtracting from the group so as to create the most appropriate test for the specific instruction that will occur.

When one has selected an appropriate number and range of test items, the computer can be directed to print a master copy of the test instrument. This master can then be reproduced and be made into student test booklets. After the test is administered, the Assessment Section will machine score it and, if requested, the results will be recorded and a series of useful reports generated for analysis by the test builder.

The Item Bank is in the process of continuing development. It will be generally available to Minnesota school districts in September of 1986. However, refinements will be made both in the test items available and in the access systems for schools. Over time, more academic disciplines will also be added to the Bank. If you are interested in learning more about the Item Bank, please contact us through:

Assessment Section
Department of Education
Capitol Square Building
550 Cedar Street
St. Paul, MN 55101

A SHORT GUIDE FOR USE OF THE MINNESOTA TEST ITEM BANK

The Minnesota Test Item Bank is designed to help school districts measure the degree of success that their students achieve in mastering locally developed outcomes as reflected in curriculum and instruction. The results of this measurement indicate if and where that curriculum and instruction needs to be improved to increase the degree of student success. Experience indicates that this objective can best be realized through the use of a rather specific process. Hopefully, this short guide will provide the reader with an outline of that process so that the item bank can be used to your district's best advantage.

KNOWING WHAT TO MEASURE

The primary strength of the item bank is its potential for creating a match between curriculum, instruction and measurement. If a match is to be achieved, it is necessary for test builders to know what is taught. It is appropriate, before tests are created, to review the curriculum and instruction to be measured. In many districts, department curriculum committees regularly perform this function. It is also appropriate to use the work of the district's PER committee for this part of the process. If the district has been using piggyback testing, this function has probably been a regular part of that testing process. If help is needed in this review, it would be appropriate to call on the concerned discipline specialist from the Division of Instructional Effectiveness for that help.

DEVELOPING MEASUREMENT INSTRUMENTS

When the student expectations for a course are known, one may plan the test or tests to measure the extent to which those expectations are being met. Using the appropriate Item Bank Index and the Test Planning Form, the test builder may fill out and mail the Test Planning Form to the Assessment Section and receive a test developed from that form. Or, one may use a personal computer equipped with a modem to interactively create a test. It is also possible that one might find that an already developed instrument such as a piggyback test will measure those expectations, and that use of such a test would be most appropriate.

SETTING STANDARDS

It's important, in any case, that local performance criteria for the test be developed, so that criteria for evaluation are available. Processes for local standard setting have been developed by the Assessment Section, and used succesfully since 1975. Again, if your district has been using piggyback testing, this process will be familiar to you. Standards should be set before the test is administered. If help in standard setting is needed, the Assessment Section is able to provide it.

TESTING

Standard methods such as those used in piggyback testing are appropriate for use when administering tests developed from the item bank. However, it's important that one consider the way in which one wishes to analyze and evaluate the results before administering the test. For example, if one wishes to separate test results by building, appropriate notation must be made on answer sheets, and the answer sheets must be batched correctly. Help with this part of the process is available from the Assessment Section.

INTERPRETING RESULTS

If tests are scored by the Assessment Section, the district will receive seven reports for district analysis. They are: an Item Analysis, an Item Report, a Report by Cluster, a Report by Subcluster, a Raw Score Distribution, an Item Response by Student, and an Individual Summary by Student. Along with locally developed standards, these reports will allow district staff members to evaluate curriculum and instruction as it relates to student performance. These reports are specific enough to permit evaluators to pinpoint strengths and weaknesses within the instructional program, especially when cross-referenced with local standards. You may also choose to score your tests locally. Again, if help in this part of the process is needed, it can be provided by the Assessment Section and by the appropriate curriculum specialist.

REVISING CURRICULUM AND INSTRUCTION

The evaluation outlined above will allow district staff members to revise existing curriculum and instruction so as to reinforce areas of strength and to remediate areas of weakness. In other words, this process will permit the normal and regular process of curriculum improvement to become more rational, and as a result, more effective. It is obvious that this is a continuing and circular process that can be regularized within the district. Help with this process, of course, can be provided by the appropriate curriculum specialist.

The process suggested above is not a revolutionary one. The only change from the traditional approach to improvement of curriculum and instruction is the availability of a simple, economical and readily available way to match curriculum and assessment. One may now test what is taught, and use the results of that testing to diagnose and treat curricular and instructional problems with a greater degree of accuracy. The suggested processes are simple in concept. They are treated in more detail in the Item Bank Handbook and individual help is available from the Department of Education in all cases. We hope that the individual school districts will find that the item bank is a useful service that helps in our collective effort to improve education in the State of Minnesota.

```
                                                       ----NUMBER OF ITEMS----
                                                   UNC  KNOW APPLY INTGR VALUE
COURSE: E1  ELEMENTARY MATH (PRIMARY)               21  3706   952    86
  OUTCOME:  1 ADDING WHOLE NUMBERS                  10   591   111
    CLUSTER:  1 ADDING 2-DIGIT NUMBERS               2    50    10
      SUBCLUST:  1 2 Addends Without Regrouping      2    16     6
      SUBCLUST:  2 2 Addends With Regrouping              24     1
      SUBCLUST:  3 3 Or More Addends                      10     3
    CLUSTER:  2 ADDING 3-DIGIT NUMBERS                    34    17
      SUBCLUST:  1 2 Addends Without Regrouping           11     1
      SUBCLUST:  2 2 Addends With Regrouping              18     5
      SUBCLUST:  3 3 Or More Addends                       5    11
    CLUSTER:  3 ADDING 4- OR MORE DIGIT #'S               13     5
                (ADDING 4- OR MORE DIGIT NUMBERS)
      SUBCLUST:  1 2 Addends Without Regrouping            1
      SUBCLUST:  2 2 Addends With Regrouping              12     5
    CLUSTER:  4 ADDING DIGIT NUMBERS                      52    22
                (ADDING 1, 2, 3-OR MORE DIGIT NUMBERS (2 ADDENDS))
      SUBCLUST:  1 1-Digit Numbers to 1-Digit #'s         16     6
                   (1-Digit Numbers to 1-Digit Numbers (3 or More Addends))
      SUBCLUST:  2 1-Digit Numbers ot 2-or More           16     3
                   (1-Digit Numbers to 2-or More Digit Numbers)
      SUBCLUST:  3 2-Or More Digit Numbers to 3           10    13
                   (2-Or More Digit Numbers to 3-or More Digit Numbers)
      SUBCLUST:  4 3-Digit Numbers to 4-or More            2
                   (3-Digit Numbers to 4-or More Digit Numbers)
      SUBCLUST:  5 1 or 2-Digit Numbers                    8
                           ITEM BANK DESCRIPTION MAINTENANCE
    CLUSTER:  5 ADDITION PROBLEMS                        124    21
                (ADDITION PROBLEM, MIXED (2 Addends))
      SUBCLUST:  1 Adding Digit Numbers                  124    21
                   (Adding 1- Or More Digit Numbers To 1- Or More Digit
                   Numbers)
    CLUSTER:  6 ALGORITHMS                               107     9
      SUBCLUST:  1 Computational Form                     15
      SUBCLUST:  2 Missing Addends                        79
      SUBCLUST:  3 Number Sentence (Equation)              4
      SUBCLUST:  4 Rounding To Estimate Sum                3
      SUBCLUST:  5 Using A Table
      SUBCLUST:  6 Checking By Reverse Addition            6     9
    CLUSTER:  7 BASIC FACTS                               86    12
      SUBCLUST:  1 Fact Families                          16     2
      SUBCLUST:  2 Sums Through 10                        29     3
      SUBCLUST:  3 Sums 10 Through 18                     41     7
    CLUSTER:  8 CONCEPTS                             1    31     6
      SUBCLUST:  1 Open Subcluster
      SUBCLUST:  2 Connecting Symbols To Concepts          9
                   (Connecting Symbols To Concepts (+, =, Vertical Form Equal
                   Sign (_)))
      SUBCLUST:  3 Equality, Same Sum for Addends    1     6     6
                   (Equality, Same Sum For Different Addends)
      SUBCLUST:  4 Meaning Of Addition, Joining           16
                   (Meaning Of Addition, Joining Groups)
    CLUSTER:  9 MENTAL ADDITION                            5
```

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RUN DATE 11/24/86      MINNESOTA STATE DEPARTMENT OF EDUCATION      PAGE E1- 2
                    EDUCATIONAL ASSESSMENT PROGRAM - ITEM BANKING
                        INDEX FOR  MATH

                                                         ----NUMBER OF ITEMS----
                                                     UNC  KNOW APPLY INTGR VALUE
        SUBCLUST:  1 Adding Doubles
        SUBCLUST:  2 One, Ten, Hundred More                  3
        SUBCLUST:  3 Other Short Cuts
        SUBCLUST:  4 Using Combinations Of 10                2
      CLUSTER: 10 PROPERTIES                           6    66     9
        SUBCLUST:  1 Grouping (Associative)            3    14     6
        SUBCLUST:  2 Identity Element (Zero)                23
        SUBCLUST:  3 Ordering (Commutative)            3    29     3
      CLUSTER: 11 READINESS                            1    23
        SUBCLUST:  1 Counting And Joining Groups
        SUBCLUST:  2 Horizontal And Vertical Forms           5
        SUBCLUST:  3 More Than
        SUBCLUST:  4 Symbols                                 2
                     (Symbols (+, =, Vertical Form Equal Sign (_)))
        SUBCLUST:  5 Terminology                       1    16
                     (Terminology (Addend, Sum, Plus, Equals, Addition,
                     Equation))
    OUTCOME:  2 CLASSIFICATION                             125    17
      CLUSTER:  1 CLASSIFYING BY ATTRIBUTES                 11     8
        SUBCLUST:  1 Completing A Matrix
        SUBCLUST:  2 Describing
        SUBCLUST:  3 Observing                               1
        SUBCLUST:  4 Predicting
        SUBCLUST:  5 Selection Of Objects                   10     8
                     (Selection Of Objects With Particular Attributes)
        SUBCLUST:  6 Sorting
      CLUSTER:  2 RECORDING CLASSIFICATIONS                 19
        SUBCLUST:  1 Graphs
        SUBCLUST:  2 Numerical                               7
        SUBCLUST:  3 Sets                                    6
        SUBCLUST:  4 Tables (Matrix)
        SUBCLUST:  5 Words
        SUBCLUST:  6 Pictorial                               6
      CLUSTER:  3 SETS                                      83     9
        SUBCLUST:  1 Identifying                            50     7
        SUBCLUST:  2 Inclusion Relationship                 21     2
                     (Inclusion Relationship (Set Within A Set))
        SUBCLUST:  3 Intersection                            6
        SUBCLUST:  4 Union                                   6
      CLUSTER:  4 TYPES OF CLASSIFICATIONS                  12
        SUBCLUST:  1 Single                                 10
        SUBCLUST:  2 Multiple                                2
    OUTCOME:  3 COMPARISON                             1     4
      CLUSTER:  1 ATTRIBUTES
        SUBCLUST:  1 Color
        SUBCLUST:  2 Design
        SUBCLUST:  3 Quantity
        SUBCLUST:  4 Shape, Plane Figures
                     (Shape, Plane Figures (2-Dimensional))
        SUBCLUST:  5 Shape, Space Figures
                     (Shape, Space Figures (3-Dimensional))
        SUBCLUST:  6 Size
```

Multnomah ESD

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Multnomah ESD Computerized Item Bank

For information about the bank contact:

Name Leon Paulson, Specialist Program Asst. (technical) or Peter Wolmut
Title Director, School Supprot Services (administrative)
Organization Multnomah ESD
Street P.O. Box 16657
City Portland State OR Zip 97211
Phone: Area code 503 Number 255-1841

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)
   - ☒ test items
   - ☐ classification of items by content
   - ☒ general objectives or topic statements
   - ☐ item specifications, detailed content descriptions, etc.
   - ☐ suggested instructional activities
   - ☐ cross references between objectives and appropriate instructional materials
   - ☐ content review or other validity information
   - ☐ reliability estimates
   - ☒ p-values
   - ☒ IRT (latent trait) calibrations
   - ☐ other item analysis data
   - ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)
   - ☒ developed by teachers
   - ☒ developed by state or local central office staff
   - ☒ developed by test development personnel within your organization
   - ☒ developed by an outside organization
   - ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)
   - ☒ review to verify appropriate content
   - ☒ content review to match items to objectives
   - ☒ content review to establish appropriate grade levels or age levels
   - ☒ editing for clarity
   - ☒ editing based on reviews by technical personnel
   - ☒ editing based on technical data
   - ☒ review for sex bias
   - ☒ review for cultural and ethnic bias
   - ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
   - ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☒	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☒	☐	printing of test materials
☐	☒	☐	test scoring services
☐	☒	☐	development of individual student profiles
☐	☒	☐	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☐	☒	☐	assistance in interpreting test data

other ____________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension									
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
	All reading areas	100	400		X	X	X			
MATHEMATICS	Computational skills									
	Concepts									
	Problem Solving (Application)									
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
	All math areas	300	4264		X	X	X	X		
	Computer Education	50	147			X	X	X		
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify: French)	50	300		X	X	X	X		
	Composition									
	Higher Order Thinking Skills									
	All language usage	200	996			X	X	X		
SCIENCE										
	Bio & Physical Science	200	5000			X	X	X		
	Higher Order Thinking Skills									
OTHER	Art & Music	40	263					X		
	Health & PE	75	245		X	X	X			
	Social Science	150	1105		X	X	X	X		
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☒ key words
☐ other ____________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________
☐ modified an existing taxonomy, please list ____________
☐ developed our own cognitive taxonomy
☐ other ____________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☒	☐
item graphics	☒	☐	☐	☐
item statistics	☐	☐	☐	☒

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☒ test development
☒ scoring
☒ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ____________
☒ specially designed for our system by Leon Paulson, Greg Thomas
☐ purchased from test or research organization ____________

c. If your software handles item management, indicate its capabilities below

☒ stores items
☒ full-screen editing
☒ can add/delete/change items
☒ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ____________

d. If your software handles test development, indicate its capabilities below:

- ☒ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☒ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ________

e. If your software handles scoring, please indicate its capabilities below:

- ☒ mark sense reader
- ☒ subtest and total scores
- ☒ objective mastery
- ☒ item statistics
- ☒ test statistics
- ☐ other ________

f. If your software handles reporting, please indicate its capabilities below:

- ☒ subtest profiles--student
- ☒ subtest profiles--class
- ☒ summary reports
- ☐ cross reference to materials/methods
- ☐ other ________

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ________

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

HP 3000

IBM-PC compatible

j. What is the name of your item banking/test scoring software package?

HP Software (Query:Image)

k. Is your software?

- ☐ available on exchange agreement
- ☒ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

$3500

m. Technical assistance in running the software is

- ☒ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

ITEM BANK DATA SHEET

Nat Assess Educ. Progress
Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) National Assessment of Educational Progress (NAEP)

For information about the bank contact:

Name Ina Mullis
Title Deputy Director
Organization NAEP/ETS
Street Rosedale Road
City Princeton **State** NJ **Zip** 08541
Phone: Area code 609 **Number** 734-5205
800 223-0267

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1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

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- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
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- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
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☐	☐	☒	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☒	☐	assistance in interpreting test data

other ____________

6. **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

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C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

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READING	Phonetic Analysis ____									
	Structural Analysis ____									
	Vocabulary ____									
	Comprehension ____									
	Reading Readiness ____									
	Reference (Study) Skills ____									
	Higher Order Thinking Skills ____									
	____									
MATHEMATICS	Computational skills ____									
	Concepts ____									
	Problem Solving (Application) ____									
	Geometry ____									
	Calculator Math ____									
	Higher Order Thinking Skills ____									
	____									
LANGUAGE ARTS	Grammar ____									
	Usage ____									
	Mechanics ____									
	Foreign Language (specify: ____)									
	Composition ____									
	Higher Order Thinking Skills ____									
	____									
SCIENCE	____									
	____									
	Higher Order Thinking Skills ____									
OTHER	____									
	____									
	Higher Order Thinking Skills ____									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

☒ objective to be tested
☒ item difficulty
☒ item type (e.g., multiple-choice)
☒ cognitive level (e.g., recall, inference)
☐ key words
☐ other ____________
☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________
☐ modified an existing taxonomy, please list ____________
☐ developed our own cognitive taxonomy
☐ other ____________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☒	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.) Will be able to answer as the products are developed.

a. What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using
☐ specially designed for our system by ____________
☐ purchased from test or research organization ____________

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ____________

d. If your software handles test development, indicate its capabilities below:

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ____________

____

____

e. If your software handles scoring, please indicate its capabilities below:

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ____________

____

____

____

f. If your software handles reporting, please indicate its capabilities below:

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____________

____

____

____

____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____________

____

____

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

____

____

____

____

j. What is the name of your item banking/test scoring software package?

____

____

____

____

____

____

k. Is your software:?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

____

____

m. Technical assistance in running the software is:

- ☐ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS
ITEM RELEASE POLICY

Since 1969, the National Assessment of Educational Progress (NAEP) has surveyed and reported the knowledge, skills, understanding, and attitudes of young Americans throughout the country. National Assessment is an education project mandated by Congress that gathers information to help educators at all levels improve the learner's educational experience. NAEP is a major ongoing effort to obtain comprehensive and dependable achievement data on a national basis. National Assessment results and related assessment materials have been used by the education community for general information, training and instruction, curriculum and program development, assessment and testing, evaluation, policy implications, and research.

The history of National Assessment and its methodology, findings, and implications for "educational progress" are discussed by NAEP and non-NAEP authors in literally hundreds of publications. These reports and journal articles can be accessed fairly easily by interested readers and can be obtained from National Assessment, the Superintendent of Documents or the Educational Resources Information Center (ERIC).

During the 14-year period from 1969 to 1983, NAEP assessed nearly 1.1 million young Americans. All regular assessments included national samples of students at age 9, 13, and 17. Most assessments also included samples of 17-year-olds no longer enrolled in school. Some of the earlier assessments included a young adult household sample (26-35 years of age). A few of the assessments were "special interest" assessments, sometimes referred to as probes, and these special assessments typically included only one or two age groups.

The original assessment plan called for 10 major learning areas to be assessed periodically: ARt, Career and Occupational Development, Citizenship, Literature, Mathematics, Music, Reading, Science, Social Studies, and Writing. However, on the recommendation of consultants and subject-matter specialists, Citizenship and Social Studies were combined beginning with the 1975-1976 assessment, and Reading and Literature were integrated during the 1979-1980 assessment.

Special probe assessments have been conducted in Fundamental or Basic Mathematics (Age 13 and 17), Basic Life Skills (Age 17), Health-Energy-Reading-Science (Adults), Consumer Skills (Age 17) and Science (Ages 9, 13, and 17).

In 1983, NAEP began sampling students by grade as well as by age. The subject areas recently assessed have included reading, writing, mathematics, science, computer understanding and literacy.

Separately funded special assessments since 1983 have included a literature and U.S. history knowledge survey and a higher order thinking skills assessment. In the 1987-1988 school year, NAEP will assess reading, writing, civics, U.S. history and geography.

Public Use Data Tapes, layouts and codebooks area available to researchers. These tapes represent a significant advance in public-use data tape technology. Data files are rectangular with one record per respondent, while data fields are all numeric with consistent missing data and nonresponse codes. All original item response and background variable data fields are included. Derived (transformed) item variables and subregional identifiers (school, district, county, state, etc.) that violate Privacy Act provisions and/or confidentiality agreements are not included.

Documentation has been rewritten and reformated for maximum usability and included on the tapes. In addition, program-readable documentation is included for SAS, SPSS and OSIRIS IV.

For the National Assessment of Educational Progress to measure change over tie, it is necessary to maintain the security of certain assessment items. Yet, to allow for states and school districts to conduct assessments and to make certain comparisons to National Assessment data, they need to administer some of the items used by NAEP to measure change. NAEP is working with an increasing number of states in the design and analysis of state assessments.

c:release

ITEM BANK DATA SHEET

North Carolina DPI

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) ______

For information about the bank contact:

Name William J. Brown
Title Assistant Superintendent for Research & Testing
Organization N.C. State Dept. Public Instruction
Street Salisbury Street
City Raleigh State N.C. Zip 27611
Phone: Area code 919 Number 733-3809

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☒	☐	all or most of the bank is available for sale
☐	☐	☐	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☐	pre-developed tests are constructed from the item bank
☐	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☐	printing of test materials
☐	☐	☐	test scoring services
☐	☐	☐	development of individual student profiles
☐	☐	☐	development of class and school profiles
☐	☐	☐	training on test administration procedures
☐	☐	☐	training on writing or selecting objectives and item specifications
☐	☐	☐	training on writing test items
☐	☐	☐	assistance in interpreting test data

other Item data in magnetic form

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension									
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills									
	Concepts									
	Problem Solving (Application)									
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
	Algebra I & II							X		
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE	Biology							X		
	Higher Order Thinking Skills									
OTHER	U.S. History							X		
	Higher Order Thinking Skills									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

- ☑ objective to be tested
- ☒ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other____________________
- ☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ____________________
- ☐ modified an existing taxonomy, please list ____________________
- ☐ developed our own cognitive taxonomy
- ☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☒	☐
item graphics	☒	☒	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☐ item management
- ☐ test development
- ☐ scoring
- ☐ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ____________________

b. From where did you obtain this software?

- ☒ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using ____________________
- ☐ specially designed for our system by ____________________
- ☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☒ full-screen editing
- ☒ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other____________________

d. **If your software handles test development, indicate its capabilities below:**

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ____________

e. **If your software handles scoring, please indicate its capabilities below:**

- ☒ mark sense reader
- ☒ subtest and total scores
- ☐ objective mastery
- ☒ item statistics
- ☐ test statistics
- ☐ other ____________

f. **If your software handles reporting, please indicate its capabilities below:**

- ☒ subtest profiles--student
- ☑ subtest profiles--class
- ☒ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

McIntosh/Item Devel.

XT, AT for scoring

j. What is the name of your item banking/test scoring software package?

NCDPI Test Screen

k. Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☒ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is:

- ☒ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Northwest Eval. Assoc.

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) NWEA BASIC SKILLS AND SCIENCE TEST ITEM BANKS

For information about the bank contact:

Name Ray Miller
Title Executive Secretary/Director Development
Organization Northwest Evaluation Association
Street 30633 11th Ave So.
City Federal Way **State** WA **Zip** 98003
Phone: Area code 206 **Number** 839-3932

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. **Which of the following are available through this bank?** (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications; detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☐ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. **What is the source of the bank's objectives and items?** (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. **What reviews or studies (if any) were performed for the items in the bank?** (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☐ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. **Which of these statements are correct for this bank?**

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☒	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. **What additional services related to the bank can be provided?** (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☒	☐	printing of test materials
☐	☒	☐	test scoring services
☐	☒	☐	development of individual student profiles
☐	☒	☐	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☐	☒	☐	assistance in interpreting test data

other __________

6 **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis					X	X	X		
	Vocabulary					X	X	X		
	Comprehension	22	2000			X	X	X		
	Reading Readiness									
	Reference (Study) Skills					X	X	X		
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills					X	X	X		
	Concepts					X	X	X		
	Problem Solving (Application)					X	X	X		
	Geometry	289	3800			X	X	X		
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar					X	X	X		
	Usage					X	X	X		
	Mechanics					X	X	X		
	Foreign Language (specify:)	354	3600							
	Composition					X	X	X		
	Higher Order Thinking Skills									
SCIENCE	Concepts/Processes					X	X	X		
	5 Subject Matter Content Areas	400	8000			X	X	X		
	Life, Earth, Physical----.									
	Higher Order Thinking Skills									
OTHER	*See Below									
	Higher Order Thinking Skills					*	*	*		

*Complex thinking skills are part of respond , some of the content area items indicated ab

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested
- ☒ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☒ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other ____________
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☐ Bloom's Taxonomy
- ☒ other well-known cognitive taxonomy, please list Tri-County Course Goal Inquiry-Problem Solving Processes-Taxonomy
- ☐ modified an existing taxonomy, please list ____________
- ☐ developed our own cognitive taxonomy
- ☐ other ____________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☐	☐
item graphics	☒	☒	☐	☐
item statistics	☒	☒	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ item management
- ☒ test development Under development
- * ☒ scoring
- ☒ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☒ on-line test administration
- ☐ other ____________

b. From where did you obtain this software?

- ☒ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using *Scale P Bas (IBM, TRS-80 Apple versions)
- ☒ specially designed for our system by Dr. Ronald Houser
- ☐ purchased from test or research organization ____________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☒ full-screen editing
- ☒ can add/delete/change items
- ☒ can add/delete/change item classifications
- ☒ will handle user history
- ☒ will handle test analysis
- ☐ other ____________

d. **If your software handles test development, indicate its capabilities below:**

☒ on-line generation of tests

☒ can use various criteria for selecting items

☒ can add/delete/change items that are computer selected

☒ automatically stores answer keys

☒ prints tests

☒ has special print features Plotter

☒ will print multiple forms

☐ other ______

e. **If your software handles scoring, please indicate its capabilities below:**

☐ mark sense reader

☐ subtest and total scores

☒ objective mastery

☒ item statistics

☒ test statistics

☐ other ______

f. **If your software handles reporting, please indicate its capabilities below:**

☐ subtest profiles--student

☐ subtest profiles--class

☒ summary reports

☐ cross reference to materials/methods

☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered

☐ total scores over time

☐ gradebook or series of scores

☐ other ______

h. If your software has graphics capabilities, please indicate these below:

☒ can generate most graphics

☐ can attach external graphics to item text

☒ can generate graphics and merge them in with item text

☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

______

j. What is the name of your item banking/test scoring software package?

Micro-C.A.T. (modified)

Test Director

Super-C.A.T.

INFORMIX - SQL

MEB Software

k. Is your software:?

☐ available on exchange agreement

☒ available for purchase from vendor

☒ available for purchase from you

☐ not available for others

l. What is the approximate cost of your testing software?

Price components by

Inquiry

m. Technical assistance in running the software is:

☒ available from us

☒ available through vendor

☐ not available

11 **Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.**

Language Usage Item Bank covers 354 goals with over 3600 items; Mathematics Item Bank covers 289 Goals with over 3800 items; Reading Item Bank covers 22 major subject matter headings with over 2000 items. Test items are filed by goal and difficulty level in a hard copy card file. The Science Item Bank has over 8000 items covering a wide range of grade levels and objectives up through high school. Excellent manuals are provided and locator index cards make retrieval and refiling of items convenient.

Northwest Eval. Assoc.

Northwest Regional Educational Laboratory

ITEM BANK DATA SHEET

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) NWEA Science Test Item Collection

For information about the bank contact:

Name Susan Smoyer
Title Project Manager
Organization NWEA Science Curriculum & Assessment Project
Street 700 Pringle Parkway SE
City Salem State OR Zip 97310
Phone: Area code 503 Number 378-4157

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☒ IRT (latent trait) calibrations } Under development
- ☒ other item analysis data }
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☐ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to ~~objectives~~ topics
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration) partial -- additional development underway.

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☒	☐	☐	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☒	☐	☐	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data
			other ________

6 **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis ________									
	Structural Analysis ________									
	Vocabulary ________									
	Comprehension ________									
	Reading Readiness ________									
	Reference (Study) Skills ________									
	Higher Order Thinking Skills ________									
	________									
MATHEMATICS	Computational skills ________									
	Concepts ________									
	Problem Solving (Application) ________									
	Geometry ________									
	Calculator Math ________									
	Higher Order Thinking Skills ________									
	________									
LANGUAGE ARTS	Grammar ________									
	Usage ________									
	Mechanics ________									
	Foreign Language (specify: ________)									
	Composition ________									
	Higher Order Thinking Skills ________									
	________									
SCIENCE	________									
	See attached lists									
	Higher Order Thinking Skills ________									
OTHER	________									
	________									
	Higher Order Thinking Skills ________									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

☒ objective to be tested
☒ item difficulty
☒ item type (e.g., multiple-choice)
All are
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other grade level
☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list __________
☐ modified an existing taxonomy, please list __________
☐ developed our own cognitive taxonomy
☐ other __________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☒	☐	☐
Item graphics	☒	☒	☐	☐
Item statistics	☐	☒	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☒ test development
☒ scoring
☒ reporting
☒ student recordkeeping (CAT)
☐ cross-reference to materials
☒ on-line test administration
☐ other __________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using __________
☒ specially designed for our system by Portland Public Schools
☒ purchased from test or research organization Assessment Systems Corp. (Minnesota)

c. If your software handles item management, indicate its capabilities below:

☒ stores items
☒ full-screen editing
☒ can add/delete/change items
☒ can add/delete/change item classifications
☐ will handle user history
☒ will handle test analysis
☐ other __________

d. **If your software handles test development, indicate its capabilities below:**

☒ on-line generation of tests

☒ can use various criteria for selecting items

☒ can add/delete/change items that are computer selected

☒ automatically stores answer keys

☒ prints tests

☒ has special print features (plotter)

☐ will print multiple forms

☐ other ______

e. **If your software handles scoring, please indicate its capabilities below:**

☐ mark sense reader

☒ subtest and total scores

☒ objective mastery

☒ item statistics

☒ test statistics

☒ other CAT

f. **If your software handles reporting, please indicate its capabilities below:**

☐ subtest profiles--student

☐ subtest profiles--class

☒ summary reports

☐ cross reference to materials/methods

☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below

☐ by objective mastered

☐ total scores over time

☐ gradebook or series of scores

☐ other ______

h. If your software has graphics capabilities, please indicate these below:

☒ can generate most graphics

☐ can attach external graphics to item text

☒ can generate graphics and merge them in with item text

☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM PC XT or AT

l. What is the approximate cost of your testing software?

______

j. What is the name of your item banking/test scoring software package?

1) Micro CAT Testing System

2) Item Bank data bases

(Informex - SQL)

3) Test Director

4) SuperCAT

k. Is your software?

☐ available on exchange agreement

☒ available for purchase from vendor

☒ available for purchase from you

☐ not available for others

m. Technical assistance in running the software is

☐ available from us

☒ available through vendor

☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

NWEA SCIENCE TEST ITEM COLLECTION
GOAL INVENTORY
(1986-87)

GOAL CATEGORY	Number of Items			
	K-3	4-6	7-9	10-12
LIFE SCIENCES				
The Cell	-	15	50	98
Zoology	46	138	209	166
Botany	51	58	117	97
Simple Life Forms	1	6	28	42
Ecology	2	52	102	63
EARTH/SPACE SCIENCES				
Geology	19	108	275	20
Oceanography	-	21	188	72
Meteorology	20	66	104	3
Space and Astronomy	15	65	135	14
PHYSICAL SCIENCES				
Measurement	-	6	36	52
Matter: Properties	6	16	41	25
Matter: States of	15	17	17	28
Matter: Changes	7	29	71	74
Matter: Structure	-	22	105	218
Periodic Law/Table	-	-	21	20
Acids, Bases, and Salts	-	-	17	25
Chemical Kinetics	-	-	4	42
Chemical Equilibrium	-	-	-	14
Oxidation	-	-	1	12
Electrochemistry	-	-	2	21
Organic Chemistry	-	-	-	20
Nuclear Chemistry	-	-	23	65
Photochemistry	-	-	-	1
Spectroscopy	-	-	-	1
Chemistry and Society	-	-	1	-
Biochemistry	-	-	3	15
Motion	7	20	62	353
Gravity	1	5	14	13
Electricity and Magnetism	4	29	113	164
Energy	31	67	135	113
Energy Resources	2	37	44	7
Light	5	17	63	111
Modern Physics	-	-	-	1
HISTORY OF SCIENCE	-	1	4	3
LABORATORY	1	2	11	7

GOAL CATEGORY	Number of Items			
	K-3	4-6	7-9	10-12
VOCABULARY	-	2	8	2
CONCEPTS				
Cause-Effect	-	4	7	11
Change	-	3	11	3
Cycle	-	4	13	5
Energy-Matter	3	23	15	11
Entropy	-	-	-	-
Equilibrium	-	1	13	-
Evolution	2	4	7	7
Field	1	1	8	4
Force	-	10	7	4
Fundamental Entities	8	8	12	6
Gradient	19	3	25	6
Interaction	-	6	9	3
Invariance	-	-	-	-
Model	-	2	13	14
Order	8	15	17	3
Organism	-	1	-	-
Perception	-	1	1	1
Probability	1	3	20	17
Population	3	13	19	12
Quantification	-	-	-	-
Replication	-	-	-	-
Resonance	-	-	-	-
Scale	1	8	21	14
Significance	-	-	-	-
Symmetry	-	-	-	-
System	2	13	20	11
Theory	-	1	-	6
Time-Space	-	-	-	1
Validation	-	-	-	-
PROCESSES				
Classifying	5	12	7	1
Communicating	-	1	3	-
Controlling Variables	-	6	22	2
Defining Operationally	-	1	6	-
Designing Experiments	-	7	14	7
Formulating Models	-	2	2	5
Hypothesizing	-	-	11	4
Inferring	-	9	30	11
Interpreting Data	1	45	58	89
Measuring	2	29	15	1
Observing	1	23	4	3
Predicting	-	6	11	2
Questioning	-	1	-	-
Using Numbers	-	7	9	7
Relating Time-Space	-	4	3	-

GOAL CATEGORY	Number of Items			
	K-3	4-6	7-9	10-12
SKILLS	-	1	3	1
INTERESTS	-	-	1	-
VALUES	-	1	4	1
INTERACTIONS	-	-	-	-
CHARACTERISTICS	-	1	1	3

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2/27/87

- SUMMARY -

INVENTORY OF ITEMS BY GRADE LEVEL AND GOAL
(1986-87)

	K-3	4-6	7-9	10-12		
Life Science	100	269	506	466	=	1,341
Earth Science	54	260	702	109	=	1,125
Physical Science	78	265	773	1,395	=	2,511
Concepts	48	124	238	139	=	549
Processes	9	156	195	132	=	492
Miscellaneous	1	8	32	17	=	58
Miscellaneous (not on list)	--	5	6	1	=	12
	290	1,087	2,452	2,259	=	6,088

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3/4/87

NWEA SCIENCE TEST ITEM COLLECTION INDEX

GOAL CATEGORY	GOAL CODE
LIFE SCIENCES	A
The Cell	A.A
Types of Cells	A.A.A
Cell Structure	A.A.B
Cell Metabolism/Function	A.A.C
Reproduction—Mitosis - Meiosis	A.A.D
Genetics/Cells	A.A.E
Evolution/Cells	A.A.F
Zoology	A.B
Classification/Animals	A.B.A
Mammals	A.B.A.A
Birds	A.B.A.B
Reptiles/Dinosaurs	A.B.A.C
Amphibians	A.B.A.D
Fish	A.B.A.E
Insects/Spiders/Shell Fish	A.B.A.F
Other Invertebrates	A.B.A.G
Structure/Animals	A.B.B
Functions/Animals	A.B.C
Metabolic Processes/Animals	A.B.D
Reproduction/Animals	A.B.E
Adaptations, Behavior, Habitat	A.B.F
Human Structure	A.B.G
Human Function/Development	A.B.H
Evolution/Animals	A.B.I
Genetics/Animals	A.B.J
Botany	A.C
Classification/Plants	A.C.A
Seed Plants/Flowers/Cones	A.C.A.A
Lower Plants	A.C.A.B
Structures/Plants	A.C.B
Functions/Plants	A.C.C
Metabolic Processes/Plants	A.C.C.A
Photosynthesis/Respiration	A.C.C.B
Reproduction/Life Cycles	A.C.C.C
Adaptations/Responses/Habitat	A.C.D
Evolution/Plants	A.C.E
Genetics/Plants	A.C.F

GOAL CATEGORY	GOAL CODE
Simple Life Forms/Diseases/Functions	A.D
Viruses	A.D.A
Bacteria	A.D.B
Monerans	A.D.C
Fungi	A.D.D
Protists	A.D.E
Ecology	A.E
Populations/Communities	A.E.A
Ecosystem/Food Chains/Webs	A.E.B
Biomes/Biosphere	A.E.C
Aquatic	A.E.C.A
Land	A.E.C.B
Urban Environments	A.E.D
Succession/Natural Changes	A.E.E
Pollution/Man-Made Changes	A.E.F
Conservation/Natural Resources	A.E.G
Limiting Factors	A.E.H
EARTH/SPACE SCIENCES	B
Geology	B.A
Earth Structures	B.A.A
Surface Features	B.A.A.A
Soil Composition	B.A.A.B
Subsurface Features	B.A.A.C
Mapping	B.A.A.D
Rocks and Minerals	B.A.B
Types of Rocks/Composition	B.A.B.A
Formation of Rocks/Processes	B.A.B.B
Relationship of Rocks to Minerals	B.A.B.C
Types, Properties of Minerals	B.A.B.D
Geologic Processes	B.A.C
Vulcanism	B.A.C.A
Crustal Movement/Earthquake	B.A.C.B
Weathering--Erosion--Deposition	B.A.C.C
Glaciation	B.A.C.D
Natural Changes	B.A.D
Evolution and Variation	B.A.D.A
Formation of Organic Fuels	B.A.D.B
Fossils as Evidence of Change	B.A.D.C
Geologic Time Scale	B.A.D.D
Forces Changing Surfaces	B.A.D.E
Forces Changing Subsurfaces	B.A.D.F
People Interactions	B.A.E
Surface Effects on People	B.A.E.A
Climate Effects on People	B.A.E.B

GOAL CATEGORY	GOAL CODE
Earth Environments	B.A.F
Soil	B.A.F.A
Water	B.A.F.B
Air/Layers	B.A.F.C
Historical Geology	B.A.G
Methods of Dating	B.A.H
Geologic Instruments	B.A.I
Application of Geologic Science	B.A.J
Related Sciences	B.A.J.A
Economic Uses	B.A.J.B
Oceanography	B.B
Ocean Topography	B.B.A
Ocean Waters	B.B.B
Composition/Properties of Sea Water	B.B.B.A
Ocean Layers and Zones	B.B.B.B
Ocean Movements	B.B.C
Ocean Circulation/Currents	B.B.C.A
Tides	B.B.C.B
Ocean Waves	B.B.C.C
Shorelines	B.B.D
Shoreline Types	B.B.D.A
Shoreline Processes	B.B.D.B
Estuaries and Bays	B.B.D.C
Life in the Oceans	B.B.E
Distribution of Ocean Life	B.B.E.A
Marine Organisms	B.B.E.B
Marine Ecosystems and Processes	B.B.E.C
Ocean/Human Interactions	B.B.E.D
Tools of Oceanography	B.B.F
Applications of Oceanography	B.B.G
Oceanography—Related Sciences	B.B.G.A
Economic Uses of Oceanography	B.B.G.B
History of Oceanography	B.B.H
Meteorology	B.C
Origin/Structure of Atmosphere	B.C.A
Weather Conditions and Causes	B.C.B
Causes of Temperature Differences	B.C.B.A
Role of Sun in Weather	B.C.B.B
Effect of Temperature on Climate	B.C.B.C
Humidity and Clouds	B.C.C
Cloud Formation Factors	B.C.C.A
Types of Clouds	B.C.C.B
Humidity Factors	B.C.C.C
Fog	B.C.C.D

GOAL CATEGORY	GOAL CODE
Wind and Storms	B.C.D
Temperature and Air Currents	B.C.D.A
Atmospheric Pressure	B.C.D.B
Earth's Rotation/Storms	B.C.D.C
Causes of Storms	B.C.D.D
Wind as an Energy Source	B.C.D.E
Weather Forecasting	B.C.E
Factors Used in Forecasting	B.C.E.A
Weather Measuring Instruments	B.C.E.B
Weather Control	B.C.F
Weather Cycle	B.C.G
Components of Water Cycle	B.C.G.A
Relationship to Moving Air Masses	B.C.G.B
Effects of Water Cycle on Plants	B.C.G.C
Forms of Precipitation	B.C.G.D
Air Masses and Fronts	B.C.H
Types/Properties/Layers of Air	B.C.H.A
Classification of Air Masses	B.C.H.B
Relationship of Air Masses	B.C.H.C
Relationship of Air Pressure	B.C.H.D
Climate	B.C.I
Factors Determining Climate	B.C.I.A
Effect of Climate on Water/Soil	B.C.I.B
Effect of Human Activity on Climate	B.C.I.C
Effect of Climate on Organisms	B.C.I.D
History of Meteorology	B.C.J
Space and Astronomy	B.D
Earth and Moon	B.D.A
Theories of Origin	B.D.A.A
Effects of Earth's Rotation	B.D.A.B
Relationship of Earth's Rotation/Seasons	B.D.A.C
Forces Causing Earth's Movement	B.D.A.D
Characteristics of Moon	B.D.A.E
Earth, Moon and Sun	B.D.A.F
Sun and Stars	B.D.B
Theories of Origin	B.D.B.A
Solar System	B.D.B.B
Planets	B.D.B.C
Conditions/Life on Planets	B.D.B.D
Effects of Gravity	B.D.B.E
Constellations	B.D.B.F
Place of Sun/Solar System	B.D.B.G
Features of the Sun	B.D.B.H
Nebulae	B.D.B.I
Other Space Phenomena	B.D.C
Dynamics (Space/Astronomy)	B.D.C.A
Types of Space Phenomena	B.D.C.B
Comets	B.D.C.C
Meteoroids and Asteroids	B.D.C.D
Characteristics of Galaxy	B.D.C.E

GOAL CATEGORY	GOAL CODE
Astronomical Studies	B.D.D
Astronomical Instruments	B.D.D.A
Astronomical Measurements	B.D.D.B
Space Travel	B.D.E
Artificial Satellites	B.D.F
PHYSICAL SCIENCES	C
Measurement	C.A
Metric System/SI	C.A.A
Factor Labeling	C.A.B
Scientific Notation	C.A.C
Significant Figures	C.A.D
Uncertainty in Measurement	C.A.E
Graphing	C.A.F
Constructing Graphs	C.A.F.A
Reading Graphs	C.A.F.B
Analyzing Graphs	C.A.F.C
Matter: Properties	C.B
Mass	C.B.A
Length	C.B.B
Area	C.B.B.A
Volume	C.B.B.B
Density/Pressure	C.B.C
Matter: States of	C.C
Gases	C.C.A
Liquids	C.C.B
Solids	C.C.C
Plasmas	C.C.D
Matter: Changes	C.D
Physical	C.D.A
Chemical	C.D.B
Chemical Equations	C.D.C
Quantitative Relationships	C.D.D
Rates of Change	C.D.E
Atomic and Nuclear	C.D.F
Nuclear Equations	C.D.G
Matter: Structure	C.E
Elements and Symbols	C.E.A
Compounds and Formulas	C.E.B
Mixtures	C.E.C

GOAL CATEGORY	GOAL CODE
Atoms	C.E.D
Molecules	C.E.E
Subatomic Particles	C.E.F
Ions	C.E.G
Bonding	C.E.H
Solutions	C.E.I
Polar Molecules	C.E.J
Models	C.E.K
Nuclear Models	C.E.K.A
Atomic Models	C.E.K.B
Molecular Models	C.E.K.C
Kinetic Molecular Theory	C.E.K.D
Gas Laws	C.E.L
Periodic Law/Table	C.F
Metals	C.F.A
Nonmetals	C.F.B
Transition Elements	C.F.C
Acids, Bases and Salts	C.G
Properties of Acids—pH	C.G.A
Properties of Bases—pOH	C.G.B
Properties of Salts	C.G.C
Titration	C.G.D
Hydrolysis	C.G.E
Normality	C.G.F
Chemical Kinetics	C.H
Nature of Reactants	C.H.A
Catalysts	C.H.B
Rates of Reaction	C.H.C
Enthalpy	C.H.D
Entropy	C.H.E
Chemical Equilibrium	C.I
Characteristics of Equilibrium	C.I.A
Factors Affecting Equilibrium	C.I.B
Oxidation - Reduction	C.J
Oxidation Numbers	C.J.A
Rules of Oxidation Numbers	C.J.B
Electrochemistry	C.K
Electrolysis	C.K.A
Galvanic Cells	C.K.B

GOAL CATEGORY	GOAL CODE
Organic Chemistry	C.L
Nomenclature of Organic Compounds	C.L.A
Properties of Organic Compounds	C.L.B
Bonding of Organic Compounds	C.L.C
Hydrocarbons	C.L.D
Organic Reactions	C.L.E
Nuclear Chemistry	C.M
Radioactivity	C.M.A
Induced Radioactivity	C.M.B
Fission	C.M.C
Fusion	C.M.D
Photochemistry	C.N
Spectroscopy	C.P
Chemistry and Society	C.Q
Hazardous Wastes	C.Q.A
Environmental Chemistry	C.Q.B
Industrial Chemistry	C.Q.C
Biochemistry	C.R
Motion	C.S
Kinematics	C.S.A
Distance/Displacement	C.S.A.A
Vectors and Scalars	C.S.A.B
Speed and Velocity	C.S.A.C
Acceleration	C.S.A.D
Forces/Dynamics	C.S.B
Types of Forces	C.S.B.A
Measurement of Force	C.S.B.B
Net Force	C.S.B.C
Friction	C.S.B.D
Laws of Motion	C.S.C
Inertia	C.S.C.A
Newton's Laws of Motion	C.S.C.B
Impulse/Conservation of Momentum	C.S.C.C
Frames of Reference	C.S.C.D
Harmonic/Circular Motion	C.S.C.E
Center of Mass	C.S.C.F

GOAL CATEGORY	GOAL CODE
Gravity	C.T
Gravitational Force	C.T.A
Gravitational Field Strength	C.T.B
Weight	C.T.C
Newton's Laws of Universal Gravitation	C.T.D
Kepler's Laws of Planetary Motion	C.T.E
Electricity and Magnetism	C.U
Static Electricity/Induction	C.U.A
Electric Force	C.U.B
Electric Field	C.U.C
Electric Circuits	C.U.D
Magnetic Objects	C.U.E
Magnetic Force	C.U.F
Magnetic Field	C.U.G
Electromagnetism/Induced Current	C.U.H
Electronics	C.U.I
Energy/Transformations	C.V
Kinetic Energy	C.V.A
Potential Energy	C.V.B
Work/Simple Machines	C.V.C
Power	C.V.D
Heat/Thermodynamics	C.V.E
Conservation of Mass/Energy	C.V.F
Sound	C.V.G
Waves	C.V.H
Energy Resources	C.W
Sources	C.W.A
Uses	C.W.B
Distribution/Availability	C.W.C
Renewable	C.W.D
Conservation	C.W.E
Environment Impact	C.W.F
Energy Economics	C.W.G
New Technologies	C.W.H
Light	C.X
Reflection/Mirrors	C.X.A
Refraction/Lenses	C.X.B
Diffraction	C.X.C
Electromagnetic Spectrum	C.X.D
Particle/Wave Theory	C.X.E
Interference	C.X.F
Polarization	C.X.G
Optical Instruments	C.X.H
Lasers	C.X.I

GOAL CATEGORY	GOAL CODE
Modern Physics	C.Y
Quantum Theory	C.Y.A
Relativity/$E = mc^2$	C.Y.B
Uncertainty Principle	C.Y.C
Space-Time Continuum	C.Y.D
Subatomic Particles and Forces	C.Y.E
HISTORY OF SCIENCE	D
CAREERS IN SCIENCE	E
LABORATORY	F
Safety	F.A
Techniques	F.B
VOCABULARY	G
Life Science Vocabulary	G.A
Earth/Space Vocabulary	G.B
Physical Science Vocabulary	G.C
CONCEPTS	H
Cause-Effect	H.A
Change	H.B
Cycle	H.C
Energy-Matter	H.D
Entropy	H.E
Equilibrium	H.F
Evolution	H.G
Field	H.H
Force	H.I
Fundamental Entities	H.J
Gradient	H.K
Interaction	H.L
Invariance	H.M
Model	H.N
Order	H.O
Organism	H.P
Perception	H.Q
Probability	H.R
Population	H.S
Quantification	H.T
Replication	H.U
Resonance	H.V
Scale	H.W
Significance	H.X
Symmetry	H.Y
System	H.Z
Theory	H.AA
Time-Space	H.BA
Validation	H.CA

GOAL CATEGORY	GOAL CODE
PROCESSES	I
Classifying	I.A
Communicating	I.B
Controlling Variables	I.C
Defining Operationally	I.D
Designing Experiments	I.E
Formulating Models	I.F
Hypothesizing	I.G
Inferring	I.H
Interpreting Data	I.I
Measuring	I.J
Observing	I.K
Predicting	I.L
Questioning	I.M
Using Numbers	I.N
Relating Time-Space	I.O
SKILLS	J
Measuring	J.A
Constructing	J.B
Handling Materials	J.C
Maintaining Materials	J.D
Using Career Materials	J.E
Equipping for Avocations	J.F
INTERESTS	K
Getting Confidence	K.A
Learning From Many Sources	K.B
Wanting and Giving Scientific Explanations	K.C
Finding Avocations	K.D
Exploring Vocations	K.E
Perceiving Heroines and Heroes	K.F
VALUES	L
Knowing and Understanding	L.A
Questioning All Things	L.B
Searching for Data and Meaning	L.C
Demanding Verification	L.D
Respecting Logic	L.E
Considering Consequences	L.F
INTERACTIONS	M
Society's Influence	M.A
Science's Influence	M.B
Mutual Understanding	M.C
Limitations of Science	M.D

GOAL CATEGORY	GOAL CODE
CHARACTERISTICS	N
Tentative	N.A
Public	N.B
Replicable	N.C
Probabilistic	N.D
Humanistic	N.E
Historic	N.F
Empirical	N.G
Holistic	N.H

dc 0142p
12/16/85

ITEM BANK DATA SHEET

NW Reg Educ. Lab

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) NWREL Item Bank

For information about the bank contact:

Name Richard W. Naccarato
Title Item Bank Manager
Organization Northwest Reginal Educational Laboratory
Street 101 S.W. Main St, Suite 500
City Portland **State** Oregon **Zip** 97204
Phone: Area code 503 **Number** 275-9571

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. **Which of the following are available through this bank?** (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. **What is the source of the bank's objectives and items?** (check all that apply)

- ☐ developed by teachers
- ☐ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☒ collected from other sources

3. **What reviews or studies (if any) were performed for the items in the bank?** (check all that apply)

- ☐ review to verify appropriate content
- ☐ content review to match items to objectives
- ☐ content review to establish appropriate grade levels or age levels
- ☐ editing for clarity
- ☐ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. **Which of these statements are correct for this bank?**

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. **What additional services related to the bank can be provided?** (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ____________

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	25	1923							
	Structural Analysis	14	576							
	Vocabulary	11	895							
	Comprehension	38	1559							
	Reading Readiness	9	135							
	Reference (Study) Skills	19	400							
	Higher Order Thinking Skills									
	Oral Reading	4	14							
	Total	120	5,502							
MATHEMATICS	Computational skills	12	859							
	Concepts	16	325							
	Problem Solving (Application)	9	234							
	Geometry	5	212							
	Calculator Math	6	42							
	Higher Order Thinking Skills									
	Measurement	29	598							
	Total	77	2270							
LANGUAGE ARTS	Grammar									
	Usage	30	1290							
	Mechanics	53	1148							
	~~Foreign Language (specify~~: Listening)	9	202							
	Composition	10	305							
	~~Higher Order Thinking Skills~~ Spelling	4	258							
	Total	160	3,203							
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☒ other Grade Level (in some cases)
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list
☐ modified an existing taxonomy, please list
☐ developed our own cognitive taxonomy
☐ other

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☒	☒	☐
Item graphics	☒	☒	☒	☐
Item statistics	☐	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using
☐ specially designed for our system by
☐ purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other

d. If your software handles test development, indicate its capabilities below:

- ☐ on-line generation of tests
- ☒ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other

* In development

e. If your software handles scoring, please indicate its capabilities below:

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other

f. If your software handles reporting, please indicate its capabilities below:

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☒ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Wang Mini

l. What is the approximate cost of your testing software?

appr. $2,500 - $4,500

j. What is the name of your item banking/test scoring software package?

k. Is your software:?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☒ not available for others

m. Technical assistance in running the software is:

- ☐ available from us
- ☐ available through vendor
- ☒ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Northwest Regional Educational Laboratory

101 S.W. Main Street, Suite 500 • Portland, Oregon 97204 • (503) 275-9500
TELEX: 701716 CABLE: NWREL SOURCE: STL[illegible]58

Writers Direct Dial Number

Thank you for your request regarding available test items.

We have approximately 7300 test items in reading and language arts available either in hard copy or on tape. We have another 4000 items in math available only in hard copy. The classification scheme for these items and samples are attached. Our current pricing structure is:

Complete (7,300) hard copy on card stock	$6,000
Complete (7,300) on tape	4,500
1,000 selected items on card stock	2,700
1,000 selected items on tape	2,300

We would, of course, be happy to negotiate other arrangements to meet your individual needs. In addition to these items, we have others that have been developed for individual school districts. These may be available to trade or for fee. Here are some more sources of items, if you have not already tried them:

Mr. Ray Miller
Northwest Evaluation Association
30633 11th Ave. South
Federal Way, WA
(206) 839-3932

(NWEA has reading, math, language arts, and science items)

Dr. John S. Martois
Los Angeles County Schools
9300 Imperial Highway
Downey, CA 90242
(213) 922-6304

(L.A. County has reading, language arts, math and life skills items)

I have included a copy of the report "Item Banking for Local Test Development: Practitioner's Handbook" by Arter and Estes (1985). Rich Naccarato is currently assembling a list of item banks which classify test items according to cognitive level (i.e. Bloom's taxonomy). You may reach him by calling (503) 275-9571.

Sincerely,

Encl.

NWREL Item Bank Hard Copy Format

Each item is printed on a separate 8-1/2" x 11" card stock page. At the top of the page is the filing guide (e.g. RE.A.1) which is made up of codes for Area (Reading or Language Arts); Cluster (e.g. A = Comprehension); and Descriptor (e.g. 1 = Main Idea). Items are then filed by Item Number. The next lines list the actual descriptor in words, response format and answer as well as a code for the source of the item.

Directions, passages, visuals and item text are printed for each item at the bottom of the card. All information is included with each item to minimize the need to merge instructions, etc. from other files. If all the information is not needed (e.g. several items in a row use the same instructions or reading passage), the test constructor may cover the unused portion of one item with the text of the item which precedes it. The constructed page is then photocopied. All that needs to be added are question numbers and group directions, such as "Use the following passage to answer questions 5 to 8."

Graphics are not included on the computer tape of the database but are provided in hard copy. They must be manually inserted into spaces left for them.

ITEM BANK ASSIGNMENT CARD--Computer Version

Description of Fields

Item Number All items are assigned a number as they are reviewed and placed into the item bank. These numbers are sequential. Thus, items testing the same skill may be located in many different areas of the bank depending on when they were processed into the system.

Function Is an indication of the request command used.

Area The major subject area of the item:

R -- Reading M -- Mathematics LA -- Language Arts
PT -- Functional Transfer

Cluster The skill measured by the item. These are lettered corresponding to the attached classification scheme. For example, in the area of reading the skill areas are:

A. Comprehension and Analysis
B. Oral Reading
C. Phonics
D. Readiness
E. Study and Research Skills
F. Vocabulary
G. Word Structure

Descriptor The subskill measured by the item. These are numbered as shown on the attached classification scheme. For example, in the area of readiness the subskills are:

01 Identify PICTURES, WORDS OR LETTERS BY VISUAL DISCRIMINATION
02 Identify the WORD THAT SOUNDS THE SAME OR DIFFERENT in a group of dictated words
03 Identify the LOWERCASE LETTERS
04 Identify the UPPERCASE LETTERS
05 CLASSIFY related/unrelated OBJECTS
06 Demonstrate ability in LEFT TO RIGHT PROGRESSION
07 DISTINGUISH SOUND varying in intensity, rhythm and source
08 ORDER pictures or oral sentences IN PROPER SEQUENCE
09 ORALLY DESCRIBE AN ILLUSTRATION

Response Format	Response formats include: MC -- Multiple-choice TF -- True/false M -- Matching OB -- Observation FR -- Free response E -- Essay P -- Performance O -- Other
Source	This describes where the item came from.
Grade	The grade level of the item.
Correct Answer	If multiple choice, this indicates the letter of the correct answer, etc. If the item is of the free response type, this would indicate where to go for samples of acceptable responses.
Passage No.	If the item is associated with a reading passage, this gives you its access code. Passages are not stored with individual items since more than one item can be written on a single passage.
Directions No.	Items are often associated with special types of instructions. This number is the access code for the appropriate instructions.
Graphics No.	If the item is associated with a visual display of some sort (e.g., a graph, form, or picture), this number is the access code. Graphics are stored separately from items in hard-copy form.
Limiter	A brief English description of the item to assist the test developer in limiting the search for the items desired.
Item Attritutes	These are one or two word English descriptor of the major emphasis in the item.

RE.A.1 Item 45437 Passage 04511

Descriptor: Main Idea
Source: E

Response format: Multiple Choice
Answer: C

Read the story below, then answer the question.

If you cook, you know how much herbs can add to the flavor of food. Dill, parsley, rosemary, basil and thyme are just a few of the most popular herbs used by cooks all over the world. Besides adding flavor, herbs add color and nutrition to food. Parsley, for instance, is a rich source of Vitamin A. Did you know you could grow your own herbs? If you have a vegetable garden already, that's an ideal spot, but if not, a sunny kitchen window will do. Herbs are fun and easy to grow and of course, fresh herbs taste best. Whether growing or simmering atop the stove, they can fill the house with a delightful aroma. So, next time you're cooking up your favorite dish add some herbs!

What is the main idea in this passage?

A. It's cheaper to grow your own food.
B. Spicy cooking is the best.
C. Herbs add a lot to food.
D. Plants need sun to grow well.

Psychological Corps

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Academic Instructional Measurement System (AIMS)

For information about the bank contact:

Name
Title
Organization The Psychological Corporation
Street 555 Academic Court
City San Antonio **State** Texas **Zip** 78204-2498
Phone: Area code 512 **Number** 270-0453

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☐	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☐	☐	☐	training on test administration procedures
☐	☐	☐	training on writing or selecting objectives and item specifications
☐	☐	☐	training on writing test items
☐	☐	☐	assistance in interpreting test data

other

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.
A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.
B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.
C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA		APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension (See attached)				x	x	x	x		
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills									
	Concepts (See Attached)				x	x	x	x		
	Problem Solving (Application)									
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar									
	Usage (See Attached)				x	x	x	x		
	Mechanics									
	Foreign Language (specify: ______)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7\. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☒ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other ______________________
☐ none

8\. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ______________________
☐ modified an existing taxonomy, please list ______________________
☐ developed our own cognitive taxonomy
☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☐	☐
item graphics	☒	☒	☐	☐
item statistics	☒	☒	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☒ test development
☒ scoring
☒ reporting
☒ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ______________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ______________________
☒ specially designed for our system by In house
☐ purchased from test or research organization ______________________

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ______________________

d. **If your software handles test development, indicate its capabilities below:**

- ☒ on-line generation of tests
- ☒ can use various criteria for selecting items
- ☒ can add/delete/change items that are computer selected
- ☒ automatically stores answer keys
- ☒ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ____

e. **If your software handles scoring, please indicate its capabilities below:**

- ☒ mark sense reader
- ☒ subtest and total scores
- ☒ objective mastery
- ☒ item statistics
- ☒ test statistics
- ☐ other ____

f. **If your software handles reporting, please indicate its capabilities below:**

- ☒ subtest profiles--student
- ☒ subtest profiles--class
- ☒ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☒ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

XT, AT

j. What is the name of your item banking/test scoring software package?

AIMS

k. Is your software:?

- ☐ available on exchange agreement
- ☒ available for purchase from vendor
- ☒ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is:

- ☒ available from us
- ☐ available through vendor
- ☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

AIMS Scope and Sequence

The 989 AIMS objectives and over 7,000 items and sample items are divided into two domains: Reading/Language Arts and Mathematics. Each domain is subdivided into Content Categories, shown below, which are divided into Content Subcategories, or objectives. Some Content Categories are tested at every grade level; others are tested only at the grades where they are appropriate. The Scope and Sequence Chart below shows the grade level where each Content Category is tested, the number of objectives tested at each grade level, and the number of items used to test those objectives.

	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grades 9-12		Total	
Reading/Language Arts	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items
Phonic Analysis	7	51	10	72	3	21													20	144
Structural Analysis	2	14	3	21	9	71	9	67	7	51	7	51	3	21	3	21	3	21	46	338
Vocabulary	8	60	10	74	12	86	9	65	6	42	6	42	4	28	3	21	4	28	62	446
Life/Study and Reference	3	23	3	21	8	58	11	79	12	86	12	86	9	65	12	86	7	51	77	555
Literal Comprehension	6	42	5	35	4	28	3	21	3	21	3	21	3	21	3	21	2	14	32	224
Inferential Comprehension	5	35	6	42	6	42	9	63	10	70	8	56	9	63	8	56	13	91	74	518
Critical Comprehension	1	9	1	7	3	25	5	51	4	32	4	32	6	44	6	44	4	28	34	272
Understanding Literature			4	28	3	21	5	35	5	35	8	58	8	58	7	49			40	284
Listening	4	30	5	37	6	44	6	44	4	28			5	35					30	218
Spelling	1	9	2	18	4	28	9	65	5	35	4	28	4	28	2	14	5	35	36	260
Mechanics	2	16	3	23	3	23	4	28	3	21	3	21	2	14	2	14	4	28	26	188
Usage	2	18	2	16	2	16	2	18	2	18	1	9	5	45	4	34	9	81	29	255
Grammar/Syntax	1	9	4	32	2	18	2	14	2	14	2	14	4	28	5	37	21	144	43	310
Proofreading					1	7	1	7	1	7	1	7	1	7	1	7	1	7	7	49
Composition																	3	21	3	21
Total Reading/LA by grade	42	316	58	426	66	488	75	557	64	460	59	425	63	457	56	404	76	549	659	4082
Mathematics																				
Numeration	5	37	4	30	3	23	4	28	3	21	2	14	1	7			1	7	23	167
Whole Numbers +	4	28	3	21	2	14	1	7	1	7							2	14	13	91
Whole Numbers −	3	21	3	21	2	14	1	7	1	7							1	7	11	77
Whole Numbers ×			1	7	2	14	3	21	4	28	3	21	2	14			2	14	17	119
Whole Numbers ÷					2	14	3	21	2	14	2	14					3	21	12	84
Decimals							3	21	7	49	5	35	5	35	5	35	16	108	41	283
Fractions	1	7	1	7	3	23	5	37	9	63	13	91	11	77	10	70	17	119	70	494
Ratio/Proportion/Percent											5	35	6	42	7	49	5	35	23	161
Measurement	3	21	3	21	6	42	5	35	6	42	5	35	5	35	5	35	11	77	49	343
Geometry	1	7	1	7	2	14	3	21	8	56	5	35	5	35	8	56	7	49	40	280
Problem Solving	4	28	3	21	6	46	4	32	7	53	7	53	4	28	5	35	21	149	61	445
Graphing/Statistics/Probability			1	7	2	14	2	14	5	35	5	35	6	42	6	42	7	49	34	238
Pre-Algebra											1	7	4	30	9	71	11	81	25	189
Essential Life Skills																	11	77	11	77
Total Mathematics by grade	21	149	20	142	30	218	34	244	53	375	53	375	49	345	55	393	115	807	330	3048
Total Mathematics, Reading/LA by grade	63	465	78	568	96	706	109	801	117	835	112	800	112	802	111	797	191	1356	989	7130

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AIMS Scope and Sequence

The 989 AIMS objectives and over 7,000 items and sample items are divided into two domains: Reading/Language Arts and Mathematics. Each domain is subdivided into Content Categories, shown below, which are divided into Content Subcategories, or objectives. Some Content Categories are tested at every grade level; others are tested only at the grades where they are appropriate. The Scope and Sequence Chart below shows the grade level where each Content Category is tested, the number of objectives tested at each grade level, and the number of items used to test those objectives.

	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8		Grades 9-12		Total	
Reading/Language Arts	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items	Obj.	Items
Phonic Analysis	7	51	10	72	3	21													20	144
Structural Analysis	2	14	3	21	9	71	9	67	7	51	7	51	3	21	3	21	3	21	46	338
Vocabulary	8	60	10	74	12	86	9	65	6	42	6	42	4	28	3	21	4	28	62	446
Life/Study and Reference	3	23	3	21	8	58	11	79	12	86	12	86	9	65	12	86	7	51	77	555
Literal Comprehension	6	42	5	35	4	28	3	21	3	21	3	21	3	21	3	21	2	14	32	224
Inferential Comprehension	5	35	6	42	6	42	9	63	10	70	8	56	9	63	8	56	13	91	74	518
Critical Comprehension	1	9	1	7	3	25	5	51	4	32	4	32	6	44	6	44	4	28	34	272
Understanding Literature			4	28	3	21	5	35	5	35	8	58	8	58	7	49			40	284
Listening	4	30	5	37	6	44	6	44	4	28			5	35					30	218
Spelling	1	9	2	18	4	28	9	65	5	35	4	28	4	28	2	14	5	35	36	260
Mechanics	2	16	3	23	3	23	4	28	3	21	3	21	2	14	2	14	4	28	26	188
Usage	2	18	2	16	2	16	2	18	2	18	1	9	5	45	4	34	9	81	29	255
Grammar/Syntax	1	9	4	32	2	18	2	14	2	14	2	14	4	28	5	37	21	144	43	310
Proofreading					1	7	1	7	1	7	1	7	1	7	1	7	1	7	7	49
Composition																	3	21	3	21
Total Reading/LA by grade	42	316	58	426	68	488	75	557	64	460	59	425	63	457	56	404	76	549	559	4082
Mathematics																				
Numeration	5	37	4	30	3	23	4	28	3	21	2	14	1	7			1	7	23	167
Whole Numbers +	4	28	3	21	2	14	1	7	1	7							2	14	13	91
Whole Numbers −	3	21	3	21	2	14	1	7	1	7							1	7	11	77
Whole Numbers ×			1	7	2	14	3	21	4	28	3	21	2	14			2	14	17	119
Whole Numbers ÷					2	14	3	21	2	14	2	14					3	21	12	84
Decimals							3	21	7	49	5	35	5	35	5	35	16	108	41	283
Fractions	1	7	1	7	3	23	5	37	9	63	13	91	11	77	10	70	17	119	70	494
Ratio/Proportion/Percent											5	35	6	42	7	49	5	35	23	161
Measurement	3	21	3	21	6	42	5	35	6	42	5	35	5	35	5	35	11	77	49	343
Geometry	1	7	1	7	2	14	3	21	8	56	5	35	5	35	8	56	7	49	40	280
Problem Solving	4	28	3	21	6	46	4	32	7	53	7	53	4	28	5	35	21	149	61	445
Graphing/Statistics/Probability			1	7	2	14	2	14	5	35	5	35	6	42	6	42	7	49	34	238
Pre-Algebra											1	7	4	30	9	71	11	81	25	189
Essential Life Skills																	11	77	11	77
Total Mathematics by grade	21	149	20	142	30	218	34	244	53	375	53	375	49	345	55	393	115	807	430	3048
Total Mathematics, Reading/LA by grade	63	465	78	568	98	706	109	801	117	835	112	800	112	802	111	797	191	1356	989	7130

AIMS Coverage

One of the strengths of AIMS is the extent of coverage of the objectives. Below is a partial listing of the Content Categories in the two domains which AIMS assesses. Beneath each Category are abbreviated descriptions of the AIMS subcategories, or objectives, with the grades listed to the left. When an objective appears across several grades, the items used to assess it become increasingly more difficult in each succeeding grade (See the chart on Page10).

Reading/Language Arts

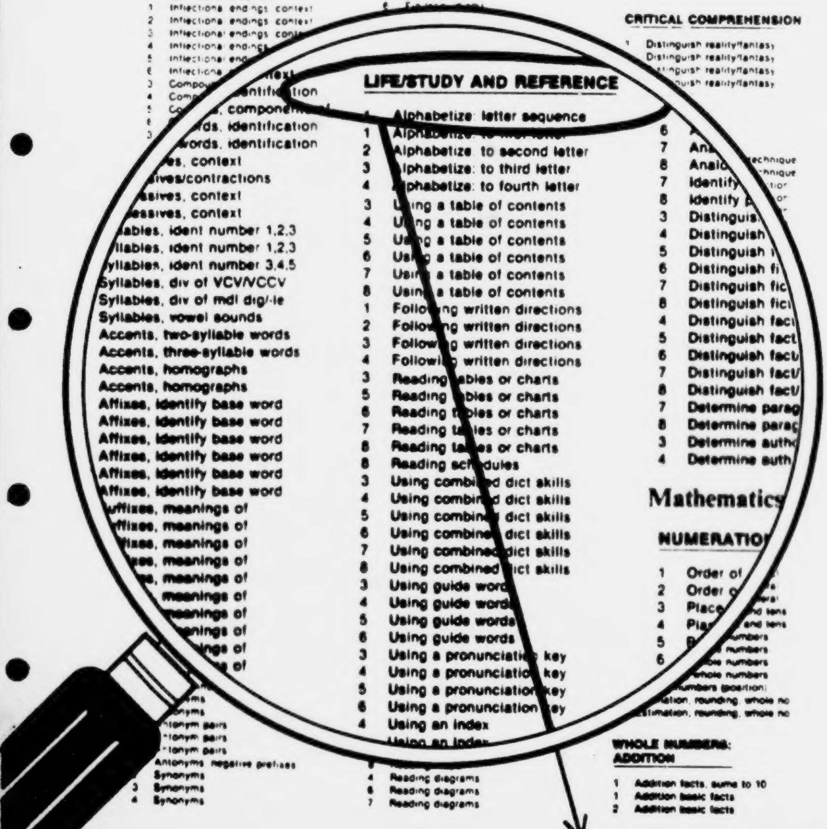
PHONIC ANALYSIS

1 Beginning consonant sounds
1 Ending consonant sounds
1 Beg consonant blends/clusters
2 Beg consonant blends/clusters
1 Begin consonant digraph sounds
2 Begin consonant digraph sounds
1 Short vowel sounds
2 Short vowel sounds
1 Short or long vowel sounds
2 Long vowel sounds
3 Long vowel sounds
1 Identify rhyming words
2 End consonant digraph sounds
2 End consonant blends/clusters
2 Middle consonant sounds
2 Hard or soft c or g sounds
2 R-controlled vowel sounds
3 R-controlled vowel sounds
2 Vowel combination sounds
3 Vowel combination sounds

STRUCTURAL ANALYSIS

1 Contractions identification
2 Contractions word pairs
3 Contractions context
1 Inflectional endings context
2 Inflectional endings context
3 Inflectional endings cont
4 Inflectional endings
5 Inflectional end
6 Inflectiona ntext
3 Compo ntification
4 Comp
5 Co , componen
6 ds, identification
3 words, identification
es, context
ives/contractions
ssives, context
essives, context
ables, ident number 1,2,3
llables, ident number 1,2,3
yllables, ident number 3,4,5
Syllables, div of VCV/VCCV
Syllables, div of mdl dig/-le
Syllables, vowel sounds
Accents, two-syllable words
Accents, three-syllable words
Accents, homographs
Accents, homographs
Affixes, identify base word
Affixes, identify base word
Affixes, identify base word
Affixes, identify base word
Affixes, identify base word
Affixes, identify base word
uffixes, meanings of
ffixes, meanings of
fixes, meanings of
xes, meanings of
es, meanings of
, meanings of
meanings of
eanings of
nings of
ngs of
s of
onyms
onyms
ntonym pairs
tonym pairs
tonym pairs
Antonyms negative prefixes
Synonyms
3 Synonyms
4 Synonyms

3 Categorizing
4 Categorizing
4 Word meaning identification
5 Word meaning identification
6 Word meaning identification
7 Word meaning identification
8 Word meaning identification
2 Homophones
3 Homophones
4 Homophones
1 Multiple meanings
1 Multiple meanings
2 Multiple meanings
3 Multiple meanings
4 Multiple meanings
5 Multiple meanings
6 Multiple meanings
7 Multiple meanings
8 Multiple meanings
2 Word meaning from context
3 Word meaning from context
3 Fig lang metaphor and simile
4 Fig lang metaphor and simile
5 Fig lang metaphor and simile
6 Fig lang metaphor and simile
3 Fig lang idioms
4 Fig lang idioms
5 Fig lang idioms
6



LIFE/STUDY AND REFERENCE

Alphabetize: letter sequence
1 Alphabetize
2 Alphabetize: to second letter
3 lphabetize: to third letter
4 phabetize: to fourth letter
3 Using a table of contents
4 Using a table of contents
5 Using a table of contents
6 Using a table of contents
7 Using a table of contents
8 Using a table of contents
1 Following written directions
2 Following written directions
3 Following written directions
4 Following written directions
3 Reading tables or charts
5 Reading tables or charts
6 Reading tables or charts
7 Reading tables or charts
8 Reading tables or charts
8 Reading schedules
3 Using combined dict skills
4 Using combined dict skills
5 Using combined dict skills
6 Using combined dict skills
7 Using combined dict skills
8 Using combined dict skills
3 Using guide words
4 Using guide words
5 Using guide words
6 Using guide words
3 Using a pronunciation key
4 Using a pronunciation key
5 Using a pronunciation key
6 Using a pronunciation key
4 Using an index
Using an index
4 Reading diagrams
6 Reading diagrams
7 Reading diagrams

6 Card catalog select card type
7 Card catalog select card type
8 Card catalog select card type
6 Card catalog select drawer
8 Adjusting rdg rate to purpose
5 Using reference sources
8 Using reference sources
4 Completing an outline
5 Completing an outline
6 Completing an outline
7 Completing an outline
8 Completing an outline

LITERAL COMPREHENSION

1 Recognize picture clues
2 Recognize picture clues

INFERENTIAL COMPREHENSION

1 Interpret picture clues
2 Interpret picture clues
1 Drawing conclusions
2 Drawing conclusions
3 Sentences in sequential order
4 Sentences in sequential order

CRITICAL COMPREHENSION

1 Distinguish reality/fantasy
Distinguish reality/fantasy
tinguish reality/fantasy
uish reality/fantasy
6 A
7 An echnique
8 Analo chnique
7 Identify tion
8 Identify or
3 Distinguis
4 Distinguish
5 Distinguish
6 Distinguish fi
7 Distinguish fic
8 Distinguish fic
4 Distinguish fac
5 Distinguish fact
6 Distinguish fact
7 Distinguish fact/
8 Distinguish fact/
7 Determine parag
8 Determine parag
3 Determine auth
4 Determine auth

Mathematics

NUMERATION

1 Order of
2 Order o
3 Place and tens
4 Pla and tens
5 B numbers
6 ole numbers
hole numbers
umbers (position)
ation, rounding, whole no
stimation, rounding, whole no

WHOLE NUMBERS: ADDITION

1 Addition facts, sums to 10
1 Addition basic facts
2 Addition basic facts
1 Addition, three addends
1 Addition, no renaming
2 Addition, no renaming
3 Addition, no renaming
2 Addition, renaming
3 Addition, renaming
4 Addition, renaming
5 Addition, renaming

WHOLE NUMBERS: SUBTRACTION

1 Subtraction facts, from 10
1 Subtraction, basic facts
2 Subtraction, basic facts
1 Subtraction, no renaming
2 Subtraction, no renaming
3 Subtraction, no renaming
2 Subtraction, renaming
3 Subtraction, renaming
4 Subtraction, renaming
5 Subtraction, renaming

WHOLE NUMBERS: MULTIPLICATION

2 Multiplication facts, to 5 x 4
3 Multiplication, basic facts
4 Multiplication, basic facts
3 Multiplication, by 1-digit
4 Multiplication, by 1-digit
5 Multiplication, by 1-digit
4 Multiplication, by 2-digits
5 Multiplication, by 3-digits
5 Multiply by 2 or 3 digits
6 Multiply by 2 or 3 digits
5 Multiples
6 Least common multiples
7 Prime numbers
6 Greatest common factors
7 Prime factorization
7 Exponents

WHOLE NUMBERS: DIVISION

3 Division, basic facts
4 Division, basic facts
3 Division, 1-digit divisors
4 Division, 1-digit divisors
5 Division, 1-digit divisors
6 Division, 1-digit divisors
4 Division, 2-digit divisors
5 Division, 2-digit divisors
6 Division, 3-digit divisors

DECIMALS

5 Place value, decimals
6 Place value, decimals
4 Reading and writing decimals
5 Reading and writing decimals
6 Powers, scientific notation
5 Comparing decimals
6 Comparing decimals
7 Comparing decimals
8 Comparing decimals
4 Adding decimals
5 Adding decimals
4 Subtracting decimals
5 Subtracting decimals
5 Multiplying decimals
6 Multiplying decimals
5 Dividing decimals
6 Dividing decimals
7 Dividing decimals
7 Repeating/terminating decimals
8 Repeating/terminating decimals
6 Estimation, rounding, decimals
7 Estimation, rounding, decimals
8 Estimation, rounding, decimals
7 Convert decimals to fractions
8 Equations, decimals, 1 oper

FRACTIONS

1 Fractional regions
2 Fractional regions
3 Fractional regions
3 Fractional part of a number
4 Fractional part of a number
4 Equivalent fractions
5 Equivalent fractions
6 Equivalent fractions
3 Comparing fractions
4 Comparing fractions
5 Comparing fractions
6 Comparing fractions
7 Comparing fractions
8 Comparing fractions
5 Simplifying to lowest terms
6 Simplifying to lowest terms
7 Simplifying to lowest terms
8 Simplifying to lowest terms
4 Adding fractions
5 Adding fractions
6 Adding fractions
7 Adding fractions
8 Adding fractions
4 Subtracting fractions
5 Subtracting fractions
6 Subtracting fractions
7 Subtracting fractions
8 Subtracting fractions
5 Multiplying fractions
6 Multiplying fractions
7 Multiplying fractions
8 Multiplying fractions
6 Dividing fractions
7 Dividing fractions
8 Dividing fractions
5 Convert frac to mixed/whole no
6 Convert frac to mixed/whole no
7 Convert frac/mixed no/whole no
5 Adding mixed numbers
6 Adding mixed numbers
7 Adding mixed numbers
8 Adding mixed numbers
5 Subtracting mixed numbers
6 Subtracting mixed numbers
7 Subtracting mixed numbers
8 Subtracting mixed numbers
6 Multiplying mixed numbers
7 Multiplying mixed numbers
8 Multiplying mixed numbers
6 Dividing mixed numbers
7 Dividing mixed numbers
8 Dividing mixed numbers
6 Convert fractions to decimals

RATIO, PROPORTION, AND PERCENT

6 Equal ratios in proportions
7 Equal ratios in proportions
8 Equal ratios in proportions
6 Convert decimals/percents
7 Convert decimals/percents
8 Convert decimals/percents
6 Convert fractions/percents
7 Convert fractions/percents
8 Convert fractions/percents
6 Convert frac/decimals/percents
7 Convert frac/decimals/percents
8 Convert frac/decimals/percents
6 Finding percent of a number
7 Finding percent of a number
8 Finding percent of a number
7 Finding no when percent known
8 Finding percent

MEASUREMENT

1 Money value of
2 Money value of
3 Money value of
1 Time
2 Time
3 Time
1 Length
2 Length
3 Length
4 Conversions, metric
5 Conversions, metric

For a closer look at this Content Category, see the next page.

AIMS Objectives Structure

A close look at this chart reveals the organization behind AIMS objectives and items. In the inset at left, the Content Category "Life/Study and Reference" falls beneath the domain of Reading/Language Arts. In the first column at left, it is classified into Content Subcategories, such as "Using an Index," which cover a specific range of skills and abilities in the general Content Category. In the second column, the subcategories, or objectives, are organized by grade, and in the third column, each objective is described in more detail. Notice that alphabetizing, for example, is tested at different levels over a range of grades—students are expected to alphabetize to the first letter in first grade, but to the third letter by third grade. Finally, the fourth column provides a pair of sample items for two of the objectives. Remember that there are six to eight items for each objective.

AIMS objectives are also classified by three Cognitive Levels in each domain, representing low, moderate, and high cognitive demands. In Reading/Language Arts, the Cognitive Levels are Recognizing, Reasoning, and Understanding; in Mathematics, they are Computation, Concepts, and Problem Solving.

Content Categories

Reading/Language Arts

A = Phonic Analysis
B = Structural Analysis
C = Vocabulary
E = Literal Comprehension
F = Inferential Comprehension
G = Critical Comprehension
H = Understanding Literature
J = Listening
K = Spelling
M = Mechanics
N = Usage
P, Q = Grammar and Syntax
R = Proofreading

Mathematics

A = Numeration
B = Whole Numbers: Addition
C = Whole Numbers: Subtraction
D = Whole Numbers: Multiplication
E = Whole Numbers: Division
F = Decimals
G = Fractions
H = Ratio/Proportion/Percent
K = Measurement
L = Geometry
M = Problem Solving
N = Graphing/Statistics/Probability
O = Pre-Algebra
P = Essential Life Skills

Life/Study and Reference

GRADE		CLASS. CODE
1	Alphabetize: letter sequence	B11DA
1	Alphabetize: to first letter	B11DB
2	Alphabetize: to second letter	B21DB
3	Alphabetize: to third letter	B31DB
4	Alphabetize: to fourth letter	B41DB
3	Using a table of contents	B36DC
4	Using a table of contents	B46DC
5	Using a table of contents	B56DC
6	Using a table of contents	B66DC
7	Using a table of contents	B76DC
8	Using a table of contents	B86DC
1	Following written directions	B15DD
2	Following written directions	B25DD
3	Following written directions	B36DD
4	Following written directions	B46DD
3	Reading tables or charts	B33DE
5	Reading tables or charts	B56DE
6	Reading tables or charts	B66DE
7	Reading tables or charts	B76DE
8	Reading tables or charts	B86DE
8	Reading schedules	B86DF
3	Using combined dict skills	B36DG
4	Using combined dict skills	B46DG
5	Using combined dict skills	B56DG
6	Using combined dict skills	B66DG
7	Using combined dict skills	B76DG
8	Using combined dict skills	B86DG
3	Using guide words	B31DH
4	Using guide words	B41DH
5	Using guide words	B51DH
6	Using guide words	B61DH
3	Using a pronunciation key	B33DJ
4	Using a pronunciation key	B43DJ
5	Using a pronunciation key	B53DJ
6	Using a pronunciation key	B63DJ
4	Using an index	B46DK
5	Using an index	B56DK
6	Using an index	B66DK
7	Using an index	B76DK
8	Using an index	B86DK
4	Encyclo: using volume nos	B42DM
5	Encyclo: using volume nos	B52DM
8	Encyclo: using volume nos	B85DM
6	Encyclo: using subheadings	B66DN
7	Encyclo: using subheadings	B76DN
2	Reading maps	B22DP
3	Reading maps	B32DP

Grade 1

Multiple meanings	
Life/Study and Reference	
Alphabetize: letter sequence	B11DA
Alphabetize: to first letter	B11DB
Following written directions	B15DD
Literal Comprehension, Non Passage-Dependent	
Recognize picture clues	B12EA
Inferential Comprehension,	

Grade 2

Multiple meanings	B24CC
Word meaning from context	B24CR
Life/Study and Reference	
Alphabetize: to second letter	B21DB
Following written directions	B25DD
Reading maps	B22DP
Literal Comprehension, Non Passage-Dependent	
Recognize picture clues	B22EA

Grade 3

Fig lang: metaphor and simile	
Fig lang: idioms	B34CU
Life/Study and Reference	
Alphabetize: to third letter	B31DB
Using a table of contents	B36DC
Following written directions	B36DD
Reading tables or charts	B33DE
Using combined dict skills	B36DG
Using guide words	B31DH
Using a pronunciation key	B33DJ
Reading maps	B32DP
ferential Comprehension	

Life/Study and Reference

GRADE		CLASS. CODE
1	**Alphabetize: letter sequence** Given three rows of the same three capital letters arranged in different order, the student will identify the row of letters arranged in alphabetical order. *Recognizing Level*	B11DA
1	**Alphabetize: to first letter** Given a word, the student will identify the word that follows it in alphabetical order. *Recognizing Level*	B11DB
1	**Following written directions** Given a written one-step direction and an example of how one student followed the direction, the student will indicate whether the direction was followed. *Understanding Level*	B15DD
2	**Alphabetize: to second letter** Given three rows of the same four words arranged in different order, the student will identify the row of words arranged in alphabetical order. *Recognizing Level*	B21DB
2	**Following written directions** Given written two-step directions and three pictures, the student will select the picture that shows the directions have been followed. *Understanding Level*	B25DD
2	**Reading maps** Given a labeled picture map, the student will identify information on the map. *Recognizing Level*	B22DP
3	**Alphabetize: to third letter** Given four rows of the same four words arranged in different order, the student will identify the row of words arranged in alphabetical order. *Recognizing Level*	B31DB
3	**Using a table of contents** Given a table of contents, the student will select stated and implied chapter and page information. *Understanding Level*	B36DC
3	**Following written directions** Given written directions describing a procedure with four major steps, the student will use the directions to select the best answer to a question. *Understanding Level*	B36DD
3	**Reading tables or charts** Given a pictured calendar month, the student will identify information about dates and days of the week. *Recognizing Level*	B33DE
3	**Using combined dict skills** Given a pronunciation key and two dictionary entries of homographs, the student will: 1. Select the meaning of the word used in context. 2. Select the pronunciation which shows the stressed syllable of the word used in context. 3. Match a vowel sound in the word with a pronunciation key word. 4. Identify appropriate guide words for the word. *Understanding Level*	B36DG
3	**Using guide words** Given a pair of guide words from a dictionary page, the student will identify the word that appears on the same page as the guide words. *Recognizing Level*	B31DH
3	**Using a pronunciation key** Given a pronunciation key, an unfamiliar word with one sound printed in boldface type, and the word's phonetic spelling, the student will identify the pronunciation key entry that represents the sound printed in boldface type. *Recognizing Level*	B33DJ
3	**Reading maps** Given a picture map with an arrowed path and a picture symbol key, the student will identify information on the map. *Understanding Level*	B32DP

AIMS

Sample Items

Find the row of words in alphabetical (abc) order.

① finger filling first fear
② fear finger filling first
③ fear filling finger first
④ filling finger first fear

	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
First Week			1	2	3	4	5
Second Week	6	7	8	9	10	11	12
Third Week	13	14	15	16	17	18	19
Fourth Week	20	21	22	23	24	25	26
Fifth Week	27	28	29	30	31		

On what date is the first Sunday of the month?

① May 1
② May 5
③ May 6
④ May 7

The AIMS Software Option

AIMS tests can be constructed by computer with the AIMS Software System. Objectives, items, item statistics, reading passages, and student and teacher directions are included on microcomputer diskettes, programmed to allow you to retrieve text from the item bank for tests, administration manuals, and scoring keys and to delete items and perform other maintenance functions. You can also use the software to integrate locally written items and objectives into the bank.

Camera-ready copy of all graphics in the bank is included with the diskettes; when your test is ready, graphics can be inserted manually into the spaces that the computer is programmed to leave in the text.

The AIMS Software Maintenance Contract

When you subscribe to the AIMS Software Maintenance Contract, you receive special benefits which make the implementation of the AIMS Software System easy and effective:

- You receive unlimited phone consultation to answer questions that might arise as you begin to use AIMS.
- You receive a substantial discount on all upgraded editions of AIMS, including new objectives and items and the latest technological advancements in software.

A Demonstration Disk with Tutorial Booklet is available to show you how AIMS Software can make local test construction efficient and easy.

Scoring

AIMS can be scored locally, using answer keys created as the test is developed. Machine-scannable answer sheets may be used, and local scoring may be done with a microcomputer, a scanner, a printer, and a test scoring program.

For more information about AIMS local scoring, please call The Psychological Corporation collect, station-to-station, at (512) 270-0540.

The AIMS Components

The *Academic Instructional Measurement System* includes 989 objectives and over 7,000 test items and sample items, organized by grade for Reading/Language Arts and Mathematics. All test materials are camera-ready and printed on high quality paper. All test materials are shipped in three-ring binders and are ready for quick test construction.

The AIMS Manual System Includes:

1 Test Development and Production Guide, designed to lead you through the steps of effective test development. It explains the structure of the bank and the coding system, and it provides suggestions for constructing tests to meet specific needs.
8 Reading/Language Arts Item/Directions/Art Binders Grades 1-8
8 Mathematics Item/Directions/Art Binders Grades 1-8
1 Reading/Language Arts Item/Directions/Art Binder Grades 9-12
1 Mathematics Item/Directions/Art Binder Grades 9-12

The binders contain high-quality, camera-ready items and graphics.

An Objectives and Sample Item Catalog, which lists objectives and gives examples of representative items and also serves as an examination kit for AIMS.

The AIMS Software Option Includes:

9 Diskettes containing Reading/Language Arts Items, Objectives, Directions, Statistics (1 per grade for grades 1-8; 1 for grades 9-12)
9 Diskettes containing Mathematics Items, Objectives, Directions, Statistics (1 per grade for grades 1-8; 1 for grades 9-12)
2 Word Processing Diskettes, software programs which enable you to print AIMS tests.
2 Bank Management Diskettes, software programs which let you add, delete, retrieve, and sort items and objectives as you build your tests.
A Demo Disk with Tutorial, which may be purchased separately to show you how the AIMS system works.
A Test Development and Production Guide
An Objectives and Sample Item Catalog
1 Binder of Art Prints
An AIMS Software User's Guide, which explains how to install the bank, how to retrieve items, how to print generated tests, how to change, add, and delete objectives, and how to maintain files.

ITEM BANK DATA SHEET

Richardson Indep S.D.

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Richardson Assessment of Mastery (RAM)

For information about the bank contact:

Name N. Blyth Riegel, PH.D.
Title Director - Research and Evaluation
Organization Richardson Indept. School District
Street 400 South Greenville Ave.
City Richardson State TX Zip 75081
Phone: Area code 214 Number 2388111

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

☒ test items
☒ classification of items by content
☒ general objectives or topic statements
☒ item specifications, detailed content descriptions, etc.
☒ suggested instructional activities Some
☒ cross references between objectives and appropriate instructional materials Some
☒ content review or other validity information
☒ reliability estimates Some? merge all
☒ p-values
☒ IRT (latent trait) calibrations
☒ other item analysis data
☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

☒ developed by teachers
☐ developed by state or local central office staff
☐ developed by test development personnel within your organization
☐ developed by an outside organization
☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

☒ review to verify appropriate content
☒ content review to match items to objectives
☒ content review to establish appropriate grade levels or age levels
☒ editing for clarity
☒ editing based on reviews by technical personnel
☒ editing based on technical data
☐ review for sex bias
☐ review for cultural and ethnic bias
☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☒ Maybe	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

"Tests" are grouped by semister only

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☒ *	☒	test scoring services
☐	☒ *	☒	development of individual student profiles
☐	☒ *	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other

* We have a database which incorporates score results from all "tests" installs data. Reports for individual students and by class.

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	48	224		X	X				
	Structural Analysis	64	448		X	X	X	X		
	Vocabulary	69	504		X	X	X	X		
	Comprehension	82	544		X	X	X	X		
	Reading Readiness	74	504		X					
	Reference (Study) Skills	31	200		X	X	X	X		
	Higher Order Thinking Skills	72	352			X	X	X		
MATHEMATICS	Computational skills	145	1016		X	X	X	X		
	Concepts	172	1240		X	X	X	X		
	Problem Solving (Application)	228	1524		X	X	X	X		
	Geometry	84	628		X	X	X	X		
	Calculator Math	2	16					X		
	Higher Order Thinking Skills	48	324			X	X	X		
	Measurement	32	248		X	X	X	X		
LANGUAGE ARTS	Grammar	27	192		X	X	X	X		
	Usage	142	1040		X	X	X	X		
	Mechanics	119	624		X	X	X	X		
	Foreign Language (specify: ______)									
	Composition	173	192		X	X	X	X		
	Higher Order Thinking Skills	48	336			X	X	X		
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other ____________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________________
☐ modified an existing taxonomy, please list ____________________
☐ developed our own cognitive taxonomy
☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☒	☐	☐
Item graphics	☒	☐	☐	☐
Item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☐ test development
☒ scoring
☒ reporting
☒ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________________

database system

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using

☒ specially designed for our system by

Contracted programmers

☐ purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ____________________

d. If your software handles test development, indicate its capabilities below:

☐ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☐ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other __________

e. If your software handles scoring, please indicate its capabilities below:

☒ mark sense reader
* ☒ subtest and total scores
* ☒ objective mastery
☐ item statistics
☐ test statistics
☐ other __________

*Score by objective and total test

f. If your software handles reporting, please indicate its capabilities below:

☒ subtest profiles--student
☒ subtest profiles--class
☒ summary reports
☐ cross reference to materials/methods
☐ other __________

g. If your software handles student recordkeeping, please indicate its capabilities below:

☒ by objective mastered
☒ total scores over time
☒ gradebook or series of scores by student only
☐ other __________

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

for database and scoring ONLY -- T1990/12 and T1 PCs

j. What is the name of your item banking/test scoring software package?

Richardson Testing System

k. Is your software:?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☐ not available for others
☒ Don't know--we were never asked before.

l. What is the approximate cost of your testing software?

? never thought of selling it

m. Technical assistance in running the software is:

☒ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Our database is probably moe interesting than the item bank -- would prefer to tell someone on phone -- too much to cover here.

ITEM BANK DATA SHEET

Riverside Pub Co.

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) MULTISCORE

For information about the bank contact:

Name MULTISCORE Editor
Title
Organization The Riverside Publishing Company
Street 8420 Bryn Mawr Avenue
City Chicago **State** IL **Zip** 60631
Phone: Area code 312 **Number** 693-0040

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☒	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ____________

Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	52	168		X	X				
	Structural Analysis	65	190		X	X	X	X		
	Vocabulary	27	97		X	X	X	X		
	Comprehension and Interpretation	114	601		X	X	X	X		
	Reading Readiness	10	51		X					
	Reference (Study) Skills	50	140		X	X	X	X		
	Higher Order Thinking Skills Yes									
	Analysis and Classification of Written Materials	49	135			X	X	X		
MATHEMATICS	Computational skills	122	366		X	X	X	X		
	Concepts Numbers and Number Theory	226	680		X	X	X	X		
	Problem Solving (Application)	28	86		X	X	X	X		
	Geometry	165	495		X	X	X	X		
	~~Calculator Math~~ Measurement	143	430		X	X	X	X		
	Higher Order Thinking Skills Yes									
	Fractions, Decimals, Percent	163	489		X	X	X	X		
	Graphs, Probability, Exponents	59	177		X	X	X	X		
LANGUAGE ARTS	Grammar	83	239		X	X	X	X		
	Usage	62	186			X	X	X		
	Mechanics Cap., Punc., Spelling	73	268		X	X	X	X		
	Oral Communication ~~Foreign Language (specify:~~)	22	66		X	X	X	X		
	Composition Writing Skills	25	82			X	X	X		
	Higher Order Thinking Skills Yes									
	Sentence Patterns, Types	88	265			X	X	X		
	Transformational Grammar	22	66			X	X	X		
SCIENCE		76	228		X	X	X	X		
	Higher Order Thinking Skills Yes									
OTHER	Social Studies	86	258		X	X	X	X		
	Life Skills	21	63				X	X		X
	Higher Order Thinking Skills Yes									

7. **Which of the following can be used to retrieve items? (Check all that apply.)**

- ☒ **objective to be tested**
- ☒ **item difficulty**
- ☐ **item type (e.g., multiple-choice)**
- ☐ **cognitive level (e.g., recall, inference)**
- ☐ **key words**
- ☐ **other** ____________________
- ☐ **none**

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

- ☐ **Bloom's Taxonomy**
- ☐ **other well-known cognitive taxonomy, please list** ____________________
- ☐ **modified an existing taxonomy, please list** ____________________
- ☐ **developed our own cognitive taxonomy**
- ☐ **other** ____________________

9. In what form are the following available? (Check all that apply.)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ **item management**
- ☒ **test development**
- ☒ **scoring**
- ☒ **reporting**
- ☐ **student recordkeeping**
- ☐ **cross-reference to materials**
- ☐ **on-line test administration**
- ☐ **other** ____________________

b. From where did you obtain this software?

- ☒ **adapted from existing spreadsheets, databases, etc.**
- ☒ **If you checked the above box, please list the programs you are using**
  Symphony, Wordstar-
  SSPC, Dbase III
- ☐ **specially designed for our system by** ____________________
- ☐ **purchased from test or research organization** ____________________

c. If your software handles item management, indicate its capabilities below:

- ☒ **stores items**
- ☒ **full-screen editing**
- ☒ **can add/delete/change items**
- ☒ **can add/delete/change item classifications**
- ☒ **will handle user history**
- ☒ **will handle test analysis**
- ☐ **other** ____________________

d. If your software handles test development, indicate its capabilities below:

☒ on-line generation of tests
☒ can use various criteria for selecting items
☒ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☒ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________

e. If your software handles scoring, please indicate its capabilities below:

☒ mark sense reader
☒ subtest and total scores
☒ objective mastery
☒ item statistics
☒ test statistics
☐ other ____________

f. If your software handles reporting, please indicate its capabilities below:

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

☒ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☒ can attach external graphics to item text
☒ can generate graphics and merge them in with item text
☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

AT 286
Interleaf
McIntosh

j. What is the name of your item banking/test scoring software package?

k. Is your software ?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☒ not available for others

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is

☒ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

MULTISCORE provides the opportunity to assemble professionally-developed tests that measure specific educational objectives of a local classroom, school, school district, or state, with the advantages of automated record-keeping. The MULTISCORE system consists of:

1. A list of over 1800 educational objectives in reading, language arts, mathematics, science, social studies, and life skills

2. A bank of over 5800 multiple-choice test questions corresponding to the objectives

3. A method for quickly and efficiently producing customized tests and support materials based on unique project specifications

4. A reporting system which provides individual and summary data

From lists of objectives, a district can select the performance objectives to be tested and specify the number of test questions to measure each objective. Riverside then prepares customized test booklets from its bank of multiple-choice test items to match the selected objectives. After the tests have been administered, they will be scored and the results reported in a variety of criterion-referenced formats.

ITEM BANK DATA SHEET

Saginaw, MI S.D.
Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) ESSENTIAL SKILLS TESTS

For information about the bank contact:

Name BARRY E. QUIMPER
Title DIRECTOR, EVALUATION, TESTING & RESEARCH
Organization SCHOOL DISTRICT OF THE CITY OF SAGINAW
Street 550 MILLARD STREET
City SAGINAW **State** MICHIGAN **Zip** 48607
Phone: Area code 517 **Number** 776-0257

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. **Which of the following are available through this bank?** (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. **What is the source of the bank's objectives and items?** (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. **What reviews or studies (if any) were performed for the items in the bank?** (check all that apply)

- ☐ review to verify appropriate content
- ☒ content review to match items to objectives
- ☐ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

*Further studies are planned as the project proceeds toward completion.

4. **Which of these statements are correct for this bank?**

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☒	☐	pre-developed tests are constructed from the item bank
☐	☒	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. **What additional services related to the bank can be provided?** (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ______

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension									
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	64	200				X	X		
	Concepts						X	X		
	Problem Solving (Application)						X	X		
	Geometry						X	X		
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar	Scheduled for Completion Fall, 1988					X	X		
	Usage						X	X		
	Mechanics						X	X		
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills						X	X		
SCIENCE	Earth Science (7,10-12), Health Life (8th)	Scheduled for Completion Fall, 1988					X	X		
	Physical Science (9th), Biology (10-12), Chemistry and Physics (10-12).						X	X		
	Higher Order Thinking Skills						X	X		
OTHER	SOCIAL STUDIES	Scheduled for Completion Fall, 1988					X	X		
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested

☒ item difficulty

☐ item type (e.g., multiple-choice)

☐ cognitive level (e.g., recall, inference)

☐ key words

☒ other Subject, skill, and objective.

☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy

☐ other well-known cognitive taxonomy, please list ____________

☐ modified an existing taxonomy, please list ____________

☐ developed our own cognitive taxonomy

☒ other Subject, skill, and objective.

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☒	☐	☐

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management

☒ test development

☒ scoring

☒ reporting

☒ student recordkeeping

☒ cross-reference to materials

☐ on-line test administration

☐ other ____________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.

☒ If you checked the above box, please list the programs you are using

Micro Cast Computer

Managed Instruction

☐ specially designed for our system by ____________

☐ purchased from test or research organization ____________

c. If your software handles item management, indicate its capabilities below:

☒ stores items

☒ full-screen editing

☒ can add/delete/change items

☒ can add/delete/change item classifications

☐ will handle user history

☒ will handle test analysis (traditional)

☐ other ____________

d. If your software handles test development, indicate its capabilities below:

☐ on-line generation of tests
☒ can use various criteria for selecting items
☒ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☒ prints tests
☐ has special print features
☐ will print multiple forms
☒ other Supports Laser Printing

e. If your software handles scoring, please indicate its capabilities below:

☒ mark sense reader
☐ subtest and total scores
☒ objective mastery
☒ item statistics
☒ test statistics
☐ other

f. If your software handles reporting, please indicate its capabilities below

☒ subtest profiles--student
☒ subtest profiles--class
☐ summary reports
☒ cross reference to materials/methods
☐ other

g. If your software handles student recordkeeping, please indicate its capabilities below:

☒ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☒ other By skill

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

UNISYS B-25

j. What is the name of your item banking/test scoring software package?

Micro Cast Computer
Managed Instruction

k. Is your software?

☐ available on exchange agreement
☒ available for purchase from vendor
☐ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software?

$3,600.00 stand alone
$5,400.00 network environment

m. Technical assistance in running the software is:

☒ available from us
☒ available through vendor
☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper We are especially interested in items measuring higher order thinking skills, and in computerized systems

Santa Clara Cnty, CA

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) ACE

For information about the bank contact:

Name
Title
Organization Santa Clara County Office of Education
Street 100 Skyport Drive, #236
City San Jose **State** Ca **Zip** 95115
Phone: Area code 408 **Number** 947-6889

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications; detailed content descriptions, etc.
- ☒ suggested instructional activities
- ☒ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ______

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6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis		at each level							
	Structural Analysis	7	70			x	x	x		
	Vocabulary	5	60			x	x	x		
	Comprehension	7	80			x	x	x		
	Reading Readiness									
	Reference (Study) Skills	12	150			x	x	x		
	Higher Order Thinking Skills	3	30			x	x	x		
			at each level							
MATHEMATICS	Computational skills	20	100			x	x	x		
	Concepts	5	25							
	Problem Solving (Application)	15	75							
	Geometry	3	20							
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar	8	50			x	x	x		
	Usage	6	40			x	x	x		
	Mechanics	6	35			x	x	x		
	Foreign Language (specify:)									
	Composition	8	40			x	x	x		
	Higher Order Thinking Skills									
	Writing sample	4	25			x	x	x		
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☒ item difficulty
☐ item type (e g , multiple-choice)
☐ cognitive level (e g , recall, inference)
☐ key words
☐ other ______________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ______________________
☐ modified an existing taxonomy, please list ______________________
☐ developed our own cognitive taxonomy
☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ______________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ______________________
☐ specially designed for our system by ______________________
☐ purchased from test or research organization ______________________

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ______________________

d. If your software handles test development, indicate its capabilities below:

☐ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☐ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________

e. If your software handles scoring, please indicate its capabilities below:

☐ mark sense reader
☐ subtest and total scores
☐ objective mastery
☐ item statistics
☐ test statistics
☐ other ____________

f. If your software handles reporting, please indicate its capabilities below:

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

____

j. What is the name of your item banking/test scoring software package?

____

k. Is your software:?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software?

____

m. Technical assistance in running the software is:

☐ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Science Res Assoc.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) SRA Objective/Item Bank

For information about the bank contact:

Name Margaret Hill
Title Manager, Editorial Test Development
Organization Science Research Associates
Street 155 N. Wacker
City Chicago State IL Zip 60606
Phone: Area code 313 Number 984-7182

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

☒ test items
☒ classification of items by content
☒ general objectives or topic statements
☐ item specifications, detailed content descriptions, etc.
☐ suggested instructional activities
☒ cross references between objectives and appropriate instructional materials
☒ content review or other validity information
☐ reliability estimates
☒ p-values
☒ IRT (latent trait) calibrations
☒ other item analysis data
☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

☐ developed by teachers
☐ developed by state or local central office staff
☒ developed by test development personnel within your organization
☐ developed by an outside organization
☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

☒ review to verify appropriate content
☒ content review to match items to objectives
☒ content review to establish appropriate grade levels or age levels
☒ editing for clarity
☒ editing based on reviews by technical personnel
☒ editing based on technical data
☒ review for sex bias
☒ review for cultural and ethnic bias
☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☒	☐	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☐	☒	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☒	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☐	☒	☐	development of individual student profiles
☐	☒	☐	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☐	☐	training on writing or selecting objectives and item specifications
☐	☐	☐	training on writing test items
☐	☒	☐	assistance in interpreting test data

other ______

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	Information			x					
	Structural Analysis	not			x	x	x	x		
	Vocabulary	available			x	x	x	x		
	Comprehension				x	x	x	x		
	Reading Readiness				x					
	Reference (Study) Skills					x	x	x		
	Higher Order Thinking Skills				x	x	x	x		
MATHEMATICS	Computational skills				x	x	x	x		
	Concepts				x	x	x	x		
	Problem Solving (Application)				x	x	x	x		
	Geometry				x	x	x	x		
	Calculator Math									
	Higher Order Thinking Skills				x	x	x	x		
LANGUAGE ARTS	Grammar				x	x	x	x		
	Usage				x	x	x	x		
	Mechanics				x	x	x	x		
	Foreign Language (specify: ________)									
	Composition				x	x	x	x		
	Higher Order Thinking Skills				x	x	x	x		
SCIENCE					x	x	x	x		
	Higher Order Thinking Skills				x	x	x	x		
OTHER					x	x	x	x		
	Higher Order Thinking Skills				x	x	x	x		

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested
- ☐ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☒ key words
- ☐ other ____________________
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ____________________
- ☐ modified an existing taxonomy, please list ____________________
- ☐ developed our own cognitive taxonomy
- ☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☐	☒	☐
item graphics	☐	☐	☒	☐
item statistics	☐	☐	☒	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ item management
- ☒ test development
- ☒ scoring
- ☒ reporting
- ☐ student recordkeeping
- ☒ cross-reference to materials
- ☐ on-line test administration
- ☐ other ____________________

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using ____________________
- ☒ specially designed for our system by SRA Personnel
- ☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☒ full-screen editing
- ☒ can add/delete/change items
- ☒ can add/delete/change item classifications
- ☒ will handle user history
- ☒ will handle test analysis
- ☐ other ____________________

d. **If your software handles test development, indicate its capabilities below:**

- ☒ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☒ can add/delete/change items that are computer selected
- ☒ automatically stores answer keys
- ☒ prints tests
- ☒ has special print features
- ☐ will print multiple forms
- ☐ other ______

e. **If your software handles scoring, please indicate its capabilities below:**

- ☒ mark sense reader
- ☒ subtest and total scores
- ☒ objective mastery
- ☒ item statistics
- ☒ test statistics
- ☐ other ______

f. **If your software handles reporting, please indicate its capabilities below:**

- ☒ subtest profiles--student
- ☒ subtest profiles--class
- ☒ summary reports
- ☒ cross reference to materials/methods
- ☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
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h. If your software has graphics capabilities, please indicate these below:

- ☒ can generate most graphics
- ☒ can attach external graphics to item text
- ☒ can generate graphics and merge them in with item text
- ☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM Mainframe

l. What is the approximate cost of your testing software?

j. What is the name of your item banking/test scoring software package?

It is an internal system

k. Is your software:?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☒ not available for others

m. Technical assistance in running the software is:

- ☐ available from us
- ☐ available through vendor
- ☒ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Tescor, Inc.
Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) FIRST NATIONAL ITEM BANK & TEST DEVELOPMENT SYSTEM (FNIB)

For information about the bank contact:

Name Teresa Sisco
Title Vice President - FNIB Operations
Organization Tescor, Inc.
Street 461 Carlisle Drive
City Herndon, State VA Zip 22070
Phone: Area code 800 Number 842-0077
703 435-9501

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
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YES	CAN BE ARRANGED	NO	
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YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other __________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

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READING	Phonetic Analysis	90	1200	←	→					
	Structural Analysis	60	600		←	—	—	→		
	Vocabulary	60	1200	←	—	—	—	→		
	Comprehension	275	2000	←	—	—	—	→		
	Reading Readiness	20	80	←	→					
	Reference (Study) Skills	90	800		←	—	—	→		
	Higher Order Thinking Skills	200	1500	←	—	—	—	→		
	Literature	80	700		←	—	—	→		
MATHEMATICS	Computational skills	1000	6000		←	—	—	→		
	Concepts	900	8000		←	—	—	→		
	Problem Solving (Application)	150	800		←	—	—	→		
	Geometry	150	700		←	—	—	→		
	Calculator Math	20	100				←	→		
	Higher Order Thinking Skills	100	700	←	—	—	—	→		
	Algebra	250	1400				←	→		
	Computer Science	90	300				←	→		
LANGUAGE ARTS	Grammar	100	300		←	—	—	→		
	Usage	200	1200		←	—	—	→		
	Mechanics	150	2000		←	—	—	→		
	Foreign Language (specify: ______)									
	Composition	170	2400		←	—	—	→		
	Higher Order Thinking Skills	150	2000	←	—	—	—	→		
SCIENCE	Science	1200	9000		←	—	—	→		
	Higher Order Thinking Skills	500	1000		←	—	—	→		
	Health	10	50				←	→		
OTHER	Social Studies	2100	13000		←	—	—	→		
	Music	80	600			←	—	→		
	Business Education	250	1000				←	→		
	Higher Order Thinking Skills - S.S.	500	1000		←	—	—	→		
	Home Economics	250	1100				←	→		

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested
- ☐ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☒ key words
- ☐ other __________
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list __________
- ☐ modified an existing taxonomy, please list __________
- ☐ developed our own cognitive taxonomy
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9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE	CD/ROM
item texts	☐	☐	☐	☐	X
item graphics	☐	☐	☐	☐	X
item statistics	☒	☐	☐	☐	

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ item management
- ☒ test development
- ☒ scoring
- ☒ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other __________

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using __________
- ☒ specially designed for our system by

Reference Technology, Inc.
Network Technology, Inc.

- ☐ purchased from test or research organization __________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☒ full-screen editing
- ☒ can add/delete/change items
- ☒ can add/delete/change item classifications
- ☒ will handle user history
- ☒ will handle test analysis
- ☐ other __________

d. If your software handles test development, indicate its capabilities below:

☒ on-line generation of tests
☒ can use various criteria for selecting items
☒ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☒ prints tests
☒ has special print features
☒ will print multiple forms
☐ other ______

e. If your software handles scoring, please indicate its capabilities below:

☒ mark sense reader
☒ subtest and total scores
☒ objective mastery
☒ item statistics
☒ test statistics
☐ other ______

f. If your software handles reporting, please indicate its capabilities below:

☒ subtest profiles--student
☒ subtest profiles--class
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☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below:

☒ by objective mastered
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☐ gradebook or series of scores
☐ other ______

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☒ can generate graphics and merge them in with item text
☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

XT, AT

j. What is the name of your item banking/test scoring software package?

FIRST NATIONAL ITEM BANK &
TEST DEVELOPMENT SYSTEM

k. Is your software?

☒ available on exchange agreement
☒ available for purchase from vendor
☒ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is:

☒ available from us
☒ available through vendor CDC
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Univ of Kansas

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Kansas Minimum Competency Test Item Bank

For information about the bank contact:

Name John Poggio
Title Project Director
Organization University of Kansas
Street School of Education
City Lawrence **State** Kansas **Zip** 66045
Phone: Area code 913 **Number** 864-3726

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

☒ test items
☒ classification of items by content
☒ general objectives or topic statements
☒ item specifications, detailed content descriptions, etc.
☐ suggested instructional activities
☐ cross references between objectives and appropriate instructional materials
☒ content review or other validity information
☒ reliability estimates
☒ p-values
☒ ~~IRT (latent trait) calibrations~~ Logist
☒ other item analysis data
☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

☒ developed by teachers
☒ developed by state or local central office staff
☒ developed by test development personnel within your organization
☐ developed by an outside organization
☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

☒ review to verify appropriate content
☒ content review to match items to objectives
☒ content review to establish appropriate grade levels or age levels
☒ editing for clarity
☒ editing based on reviews by technical personnel
☒ editing based on technical data
☒ review for sex bias
☒ review for cultural and ethnic bias
☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☒	☐	☐	all or most of the bank is available for sale
☐	☒	☐	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☒	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	5	75		x					
	Structural Analysis	5	75		x	x	x			
	Vocabulary	4	60		x	x	x	x		
	Comprehension	5	75		x	x	x	x		
	Reading Readiness									
	Reference (Study) Skills	5	75			x	x	x	x	
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	6	85		x	x	x	x		
	Concepts	7	95		x	x	x	x		
	Problem Solving (Application)	8	110		x	x	x	x		
	Geometry	4	60		x	x	x	x		
	Calculator Math									
	Higher Order Thinking Skills									
	Measurement/Estimation	4	60		x	x	x	x		
LANGUAGE ARTS	Grammar	5	75		x	x	x	x		
	Usage	5	75		x	x	x	x		
	Mechanics	5	75		x		x	x		
	Foreign Language (specify: ____)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER	Consumer Skills	10	95				x	x		
	Basic Life Skills	10	95				x	x		
	Higher Order Thinking Skills									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

- ☒ objective to be tested
- ☒ item difficulty
- ☒ item type (e.g., multiple-choice)
- ☒ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other ______________________
- ☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ______________________
- ☐ modified an existing taxonomy, please list ______________________
- ☐ developed our own cognitive taxonomy
- ☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☒	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☒	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ item management
- ☐ test development
- ☒ scoring
- ☒ reporting
- ☒ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ______________________

b. From where did you obtain this software?

- ☒ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using ______________________
- ☒ specially designed for our system by us
- ☐ purchased from test or research organization ______________________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☐ full-screen editing
- ☒ can add/delete/change items
- ☒ can add/delete/change item classifications
- ☒ will handle user history
- ☒ will handle test analysis
- ☐ other ______________________

d. **If your software handles test development, indicate its capabilities below:**

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ____________

e. **If your software handles scoring, please indicate its capabilities below:**

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ____________

f. **If your software handles reporting, please indicate its capabilities below:**

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☒ by objective mastered
- ☒ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM (Mainframe & PC)

NCS

VAX

l. What is the approximate cost of your testing software?

INQUIRIES INVITED -??-

j. What is the name of your item banking/test scoring software package?

--many

e.g., SPSS, Logist, etc.

k. Is your software?

- ☐ available on exchange agreement
- ☒ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

m. Technical assistance in running the software is:

- ☒ available from us
- ☐ available through vendor
- ☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

West Palm Beach, FL

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) ____________________

For information about the bank contact:

Name R.C. Johnson (Interim)
Title Director, Dept. of Research and Evaluation
Organization Palm Beach County Schools
Street 3323 Belvedere Road
City West Palm Beach **State** Florida **Zip** 33402
Phone: Area code 305 **Number** 684-5114

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☒ suggested instructional activities
- ☒ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☐ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO		
☐	☐	☒		all or most of the bank is available for sale
☒	☐	☐		all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	?	pre-developed tests are constructed from the item bank
☐	☐	☒	?	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	?	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ____________________

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis ______									
	Structural Analysis ______									
	Vocabulary ______									
	Comprehension ______									
	Reading Readiness ______									
	Reference (Study) Skills ______									
	Higher Order Thinking Skills ______									
	______									
MATHEMATICS	Computational skills ______	66	331		x	x	x			
	Concepts ______	88	469		x	x	x			
	Problem Solving (Application) ______	144	718		x	x	x			
	Geometry ______	98	392					x		
	Calculator Math ______									
	Higher Order Thinking Skills ______									
	Alegebra I	95	380					x		
	Alegebra II	100	400					x		
LANGUAGE ARTS	Grammar ______									
	Usage ______									
	Mechanics ______									
	Foreign Language (specify: ______)									
	Composition ______									
	Higher Order Thinking Skills ______									
	______									
SCIENCE	______									
	______									
	Higher Order Thinking Skills ______									
OTHER	______									
	______									
	Higher Order Thinking Skills ______									

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested
- ☒ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other ______________________
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ______________________
- ☐ modified an existing taxonomy, please list ______________________
- ☐ developed our own cognitive taxonomy
- ☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☐ item management
- ☐ test development
- ☒ scoring
- ☒ reporting
- ☒ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ______________________

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using ______________________
- ☒ specially designed for our system by internally developed
- ☐ purchased from test or research organization ______________________

c. If your software handles item management, indicate its capabilities below:

- ☐ stores items
- ☐ full-screen editing
- ☐ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other ______________________

d. If your software handles test development, indicate its capabilities below:

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ____________

e. If your software handles scoring, please indicate its capabilities below:

- ☒ mark sense reader
- ☒ subtest and total scores
- ☒ objective mastery
- ☒ item statistics
- ☐ test statistics
- ☐ other ____________

f. If your software handles reporting, please indicate its capabilities below:

- ☒ subtest profiles--student
- ☒ subtest profiles--class
- ☒ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☒ by objective mastered
- ☒ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

IBM 4381 Mainframe

l. What is the approximate cost of your testing software?

Would have to be specifically discussed with interested party

j. What is the name of your item banking/test scoring software package?

Internally developed programs

k. Is your software:?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

Would have to be specifically discussed with interested party.

m. Technical assistance in running the software is:

- ☐ available from us
- ☐ available through vendor
- ☐ not available

Would have
be specificall
discussed with
interested part

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Yakima, WA S.D.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Language Arts, Social St., Reading, and Math Grades 3-8

For information about the bank contact

Name Dan Penhallegon
Title Director, Testing and Evaluation
Organization Yakima School District
Street 104 N. 4th Avenue
City Yakima State WA Zip 98902
Phone: Area code 509 Number 575-3484

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. **Which of the following are available through this bank?** (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☒ suggested instructional activities
- ☒ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. **What is the source of the bank's objectives and items?** (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☒ collected from other sources

3. **What reviews or studies (if any) were performed for the items in the bank?** (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. **Which of these statements are correct for this bank?**

YES	CAN BE ARRANGED	NO	
☐	☒	☐	all or most of the bank is available for sale
☒	☐	☐	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ____________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area If the appropriate content area is not listed, please write it in the space provided

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns

B We do not want to limit the content of the catalog to basic skills item banks If your item bank deals with other content areas, please be sure to include them

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	35	200		x	x	x			
	Structural Analysis	30	200		x	x	x			
	Vocabulary	25	200		x	x	x			
	Comprehension	85	500		x	x	x			
	Reading Readiness									
	Reference (Study) Skills	40	200		x	x	x			
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	200	2,500		x	x	x			
	Concepts	65	1,000		x	x	x			
	Problem Solving (Application)	50	1,000		x	x	x			
	Geometry	10	500			x	x			
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar	x	800			x	x			
	Usage	x	800			x	x			
	Mechanics	x	1,200			x	x			
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER	Social Studies	x	1,500			x	x			
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other ____________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________________
☐ modified an existing taxonomy, please list ____________________
☐ developed our own cognitive taxonomy
☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☐	☐	☐
Item graphics	☒	☐	☐	☐
Item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☐ test development
☒ scoring
☒ reporting
☒ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________________

b. From where did you obtain this software?

☒ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using

CAM PLUS

☒ specially designed for our system by

District Staff

☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

☒ stores items
☒ full-screen editing
☒ can add/delete/change items
☒ can add/delete/change item classifications
☒ will handle user history
☒ will handle test analysis
☐ other ____________________

d. **If your software handles test development, indicate its capabilities below:**

- ☒ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☒ can add/delete/change items that are computer selected
- ☒ automatically stores answer keys
- ☒ prints tests
- ☒ has special print features
- ☒ will print multiple forms
- ☐ other ______

e. **If your software handles scoring, please indicate its capabilities below:**

- ☒ mark sense reader
- ☒ subtest and total scores
- ☒ objective mastery
- ☒ item statistics
- ☒ test statistics
- ☐ other ______

f. **If your software handles reporting, please indicate its capabilities below:**

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☒ summary reports
- ☒ cross reference to materials/methods
- ☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☒ by objective mastered
- ☒ total scores over time
- ☒ gradebook or series of scores
- ☐ other ______

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☒ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Wang System 4000
Apple IIe
Apple MacIntosh
MicroVax II

l. What is the approximate cost of your testing software?

Not Available

j. What is the name of your item banking/test scoring software package?

Locally developed

k. Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☒ not available for others

m. Technical assistance in running the software is

- ☐ available from us
- ☐ available through vendor
- ☒ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

SECTION B

PRE-DEVELOPED TESTS ONLY AVAILABLE

American Guidance Services

•ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) __________

For information about the bank contact:

Name Judy Ringaman
Title Manager of Customized Tests
Organization American Guidance Service
Street Publishers' Building
City Circle Pines State MN Zip 55014
Phone: Area code 612 Number 786-4343

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. **Which of the following are available through this bank?** (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. **What is the source of the bank's objectives and items?** (check all that apply)

- ☐ developed by teachers
- ☒ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☐ collected from other sources

3. **What reviews or studies (if any) were performed for the items in the bank?** (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☐ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. **Which of these statements are correct for this bank?**

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☐	☒	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☒	☐	items are used to construct tests based on objectives developed by the user

5. **What additional services related to the bank can be provided?** (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other __________

6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary		750				X	X		
	Comprehension		400				X	X		
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills		300				X	X		
	Concepts		300				X	X		
	Problem Solving (Application)		300				X	X		
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
	Medical/Clerical		800							X
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☐ objective to be tested

☐ item difficulty

☐ item type (e.g., multiple-choice)

☒ cognitive level (e.g., recall, inference)

☐ key words

☒ other content area, blueprint location

☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy

☐ other well-known cognitive taxonomy, please list ______

☐ modified an existing taxonomy, please list ______

☐ developed our own cognitive taxonomy

☐ other ______

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☐	☐	☒
item graphics	☐	☐	☐	☒
item statistics	☐	☐	☐	☒

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management

☐ test development

☐ scoring

☐ reporting

☐ student recordkeeping

☐ cross-reference to materials

☐ on-line test administration

☐ other ______

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.

☐ If you checked the above box, please list the programs you are using

☐ specially designed for our system by ______

☐ purchased from test or research organization ______

c. If your software handles item management, indicate its capabilities below:

☐ stores items

☐ full-screen editing

☐ can add/delete/change items

☐ can add/delete/change item classifications

☐ will handle user history

☐ will handle test analysis

☐ other ______

d. **If your software handles test development, indicate its capabilities below:**

☐ on-line generation of tests

☐ can use various criteria for selecting items

☐ can add/delete/change items that are computer selected

☐ automatically stores answer keys

☐ prints tests

☐ has special print features

☐ will print multiple forms

☐ other ____________

e. **If your software handles scoring, please indicate its capabilities below:**

☐ mark sense reader

☐ subtest and total scores

☐ objective mastery

☐ item statistics

☐ test statistics

☐ other ____________

f. **If your software handles reporting, please indicate its capabilities below:**

☐ subtest profiles--student

☐ subtest profiles--class

☐ summary reports

☐ cross reference to materials/methods

☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered

☐ total scores over time

☐ gradebook or series of scores

☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics

☐ can attach external graphics to item text

☐ can generate graphics and merge them in with item text

☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Prime

j. What is the name of your item banking/test scoring software package?

k. Is your software:?

☐ available on exchange agreement

☐ available for purchase from vendor

☐ available for purchase from you

☐ not available for others

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is:

☐ available from us

☐ available through vendor

☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Just getting off the ground. Responses included here not necessarily true of entire item bank, but will be true of all items eventually.

Detroit Pub Schools

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) DET High School Proficiency Exam.
DET. Assessment of Basic Skills

For information about the bank contact:

Name Sharon Johnson-Lewis
Title Director Evaluation & Testing
Organization Detroit Public Schools
Street 5035 Woodward
City Detroit **State** MI **Zip** 48202
Phone: Area code 313 **Number** 494-2022

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☒ suggested instructional activities
- ☒ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ____________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis			X						
	Structural Analysis									
	Vocabulary				X	X	X	X		
	Comprehension			X	X	X	X			
	Reading Readiness									
	Reference (Study) Skills						X	X		
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills			X	X	X	X			
	Concepts			X	X	X	X	X		
	Problem Solving (Application)			X	X	X	X	X		
	Geometry			X	X	X	X			
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar					X	X	X		
	Usage					X	X	X		
	Mechanics									
	Foreign Language (specify: ______)									
	Composition			X	X	X	X	X	X	
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills			X	X	X	X	X		

7. **Which of the following can be used to retrieve items? (Check all that apply)**

- ☒ objective to be tested
- ☐ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other ______________________
- ☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ______________________
- ☐ modified an existing taxonomy, please list ______________________
- ☐ developed our own cognitive taxonomy
- ☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☐	☐	☐
item graphics	☐	☐	☐	☐
item statistics	☐	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☐ item management
- ☐ test development
- ☐ scoring
- ☐ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ______________________

____

____

____

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using

____

____

____

- ☐ specially designed for our system by

____

- ☐ purchased from test or research organization

____

c. If your software handles item management, indicate its capabilities below.

- ☐ stores items
- ☐ full-screen editing
- ☐ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other ______________________

____

____

____

____

d. **If your software handles test development, indicate its capabilities below:**

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ______

______

______

e. **If your software handles scoring, please indicate its capabilities below:**

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ______

______

______

______

f. **If your software handles reporting, please indicate its capabilities below:**

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ______

______

______

______

______

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ______

______

______

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

______

______

______

______

j. What is the name of your item banking/test scoring software package?

______

______

______

______

______

______

k. Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

______

______

m. Technical assistance in running the software is

- ☐ available from us
- ☐ available through vendor
- ☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Dist of Columbia Schools

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) END-OF-COURSE EXAMINATIONS (Secondary Level, grades 7-12)

For information about the bank contact:

Name Dr. Valeria A. Ford
Title Director, Student Assessment Office
Organization District of Columbia Public Schools
Street 415 Twelfth Street, N.W. Suite 1001
City Washington **State** D.C. **Zip** 20004
Phone: Area code 202 **Number** 724-4164

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply) Planned for implementation over the next 3 years

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel Planned over the next 3 years
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration) Planned over the next 3 years

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply) Planned for implementation over the next 3 years

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☐	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data
			other

6. **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary Development						x	x		
	Comprehension						x	x		
	Reading Readiness									
	Reference (Study) Skills						x	x		
	Higher Order Thinking Skills									
	Remedial/corrective Reading						x	x		
	Development Reading I						x	x		
MATHEMATICS	Computational skills									
	Concepts									
	Problem Solving (Application)									
	Geometry						x	x		
	Calculator Math									
	Higher Order Thinking Skills									
	Elementary Algebra						x	x		
	Essential Mathematics I						x	x		
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify: ______)									
	Composition									
	Higher Order Thinking Skills									
	English I						x			
	English II							x		
SCIENCE	Biology							x		
	Science for Decision Making							x		
	Higher Order Thinking Skills									
	Laboratory Skills							x		
OTHER	History & overnment of D.C.						x	x		
	Civics						x	x		
	Higher Order Thinking Skills									
	World Cultures						x	x		

7. **Which of the following can be used to retrieve items? (Check all that apply)**

System to be implemented over the next 3 years. (#s 7,9, & 10)

- ☒ objective to be tested
- ☒ item difficulty
- ☒ item type (e.g., multiple-choice)
- ☒ cognitive level (e.g., recall, inference)
- ☒ key words
- ☐ other ____________
- ☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ____________
- ☐ modified an existing taxonomy, please list ____________
- ☒ developed our own cognitive taxonomy
- ☐ other ____________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☒	☐	☐
Item graphics	☒	☒	☐	☐
Item statistics	☒	☒	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) will ~~does~~ this software perform?

- ☒ item management
- ☒ test development
- ☒ scoring
- ☒ reporting
- ☒ student recordkeeping
- ☐ cross-reference to materials
- ☒ on-line test administration
- ☐ other ____________

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using ____________
- ☒ specially designed for our system by In-house personnel
- ☒ purchased from test or research organization ____________

c. If your software handles item management, indicate its capabilities below:

Our choice will handle:

- ☒ stores items
- ☒ full-screen editing
- ☒ can add/delete/change items
- ☒ can add/delete/change item classifications
- ☒ will handle user history
- ☒ will handle test analysis
- ☐ other ____________

d. If your software handles test development, indicate its capabilities below:

☒ on-line generation of tests

☒ can use various criteria for selecting items

☒ can add/delete/change items that are computer selected

☒ automatically stores answer keys

☒ prints tests

☒ has special print features

☒ will print multiple forms

☐ other ______

e. If your software handles scoring, please indicate its capabilities below:

☒ mark sense reader

☒ subtest and total scores

☒ objective mastery

☒ item statistics

☒ test statistics

☐ other ______

f. If your software handles reporting, please indicate its capabilities below:

☒ subtest profiles--student

☒ subtest profiles--class

☒ summary reports

☒ cross reference to materials/methods

☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below: Decision not made yet.

☒ by objective mastered

☒ total scores over time

☒ gradebook or series of scores

☐ other ______

h. If your software has graphics capabilities, please indicate these below:

☒ can generate most graphics

☒ can attach external graphics to item text

☒ can generate graphics and merge them in with item text

☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Microcomputer

Sperry

IBM

j. What is the name of your item banking/test scoring software package?

Item Banking: Test Builder (Data Guide)

Test Scoring: In-House developed system

k. Is your software:?

☐ available on exchange agreement

☒ available for purchase from vendor

☐ available for purchase from you

☐ not available for others

l. What is the approximate cost of your testing software?

Item Banking - $1500.00

Test Scoring/Reporting approx. $10,000.00

m. Technical assistance in running the software is:

☐ available from us

☒ available through vendor

☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Florida State DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) District Item Bank - Grades 3, 5, 8, and 10

For information about the bank contact

Name Dr. Thomas H. Fisher
Title Administrator, Assessment, Testing, and Evaluation
Organization Department of Education
Street 506 Knott Building
City Tallahassee State Florida Zip 32399
Phone: Area code 904 Number 488-8198

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☐ classification of items by content
- ☐ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration) (grades 3 and 10 only)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☒	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data
			other

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary	5	124			X	X	X		
	Comprehension	10	228			X	X	X		
	Reading Readiness									
	Reference (Study) Skills	5	74			X	X			
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills	37	373			X	X	X		
	Concepts	23	231			X	X	X		
	Problem Solving (Application)	17	117			X	X			
	Geometry	3	32			X	X			
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar	10	60			X	X			
	Usage									
	Mechanics	15	198			X	X	X		
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
	Organizing	6	48			X	X			
	Supplying Information	7	56			X	X			
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☒ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☒ other Unique item number
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ______
☐ modified an existing taxonomy, please list ______
☐ developed our own cognitive taxonomy
☐ other ______

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ______

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ______
☐ specially designed for our system by ______
☐ purchased from test or research organization ______

c. If your software handles item management, indicate its capabilities below:

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ______

d **If your software handles test development, indicate its capabilities below:**

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ______

e **If your software handles scoring, please indicate its capabilities below:**

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ______

f. **If your software handles reporting, please indicate its capabilities below:**

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ______

g If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ______

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

______

j. What is the name of your item banking/test scoring software package?

______

k. Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l What is the approximate cost of your testing software?

______

m. Technical assistance in running the software is

- ☐ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Maryland State DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Maryland Functional Testing Program

For information about the bank contact:

Name Dr. Robert Gabrys
Title Chief, Program Assessment, Eval. & Instr. Support Branch
Organization Maryland State Department of Education
Street 200 W. Baltimore Street
City Baltimore State MD Zip 21201
Phone: Area code 301 Number 333-2382

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☒ suggested instructional activities
- ☒ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ____________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary	2	15				X	X		
	Comprehension	30	240				X	X		
	Reading Readiness									
	Reference (Study) Skills	17	115				X	X		
	Higher Order Thinking Skills									
	Understanding Forms	8	115				X	X		
	Following Directions	17	115				X	X		
MATHEMATICS	Computational skills	13	240				X	X		
	Concepts	4	90				X	X		
	Problem Solving (Application)	6	90				X	X		
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills	NONE								
	Using Data	3	90				X	X		
	Measurement	4	65							
LANGUAGE ARTS	Grammar									
	Usage Grade 9 only*	5	70					X		
	Mechanics Cap., punc.; Gr. 9 only*	16	140					X		
	Foreign Language (specify:)									
	Composition Grade 9: 2 essays	23	2					X		
	Higher Order Thinking Skills									
	Grade 7: Multiple choice	39	45				X			
	*Beginning in 1989									
SCIENCE										
	Higher Order Thinking Skills									
OTHER	Citizenship	23	255					X		
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☒ item difficulty
☐ item type (e g , multiple-choice)
☐ cognitive level (e g , recall, inference)
☐ key words
☐ other________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ________________
☐ modified an existing taxonomy, please list ________________
☐ developed our own cognitive taxonomy
☐ other ________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☐	☐	☒
item graphics	☐	☐	☐	☒
item statistics	☐	☐	☐	☒

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☐ test development
☒ scoring
☒ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☒ other We also use MicroCat for micro-computer adaptive testing

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using ________________
☒ specially designed for our system by Staff
☐ purchased from test or research organization ________________

c. If your software handles item management, indicate its capabilities below

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other________________

d. **If your software handles test development, indicate its capabilities below:**

☐ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☐ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________

e. **If your software handles scoring, please indicate its capabilities below:**

☒ mark sense reader
☒ subtest and total scores
☐ objective mastery
☒ item statistics
☒ test statistics
☒ other Rasch calibrating and linking; item info. banking; other item and score analyses

f. **If your software handles reporting, please indicate its capabilities below**

☒ subtest profiles--student
☐ subtest profiles--class
☒ summary reports
☐ cross reference to materials/methods
☒ other subtest and test projects for school and LEA

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

HP3000

l. What is the approximate cost of your testing software?

$200,000

j. What is the name of your item banking/test scoring software package?

Link

k. Is your software:?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☐ not available for others

m. Technical assistance in running the software is

☒ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

We use MicroCat for adaptive testing; currently undergoing field testing. We are just beginning to develop frameworks for thinking skills assessment.

Missouri State DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) ______

For information about the bank contact:

Name James L. Friedebach
Title Director, Testing & Assessment
Organization Dept. of Elem. & Sec. Education
Street PO Box 480
City Jefferson City State MO Zip 65102
Phone: Area code 314 Number 751-1395

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☐ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☐	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☐	printing of test materials
☐	☒	☐	test scoring services
☐	☐	☐	development of individual student profiles
☐	☒	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ______

6 **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

Core competencies have been developed for grades 2 through 10 inclusive. The area of Reading/Language/Arts/English, Math, Science, Social Studies/Civics are included in the Core competencies/key skills. Approximately 25 core competencies/key skills have been identified per grade. For more technical information please contact:

Dr. Steve Osterland, Director
Center for Educational Assessment
403 South 6th Street
Columbia, MO 65211

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis ______									
	Structural Analysis ______									
	Vocabulary ______									
	Comprehension ______									
	Reading Readiness ______									
	Reference (Study) Skills ______									
	Higher Order Thinking Skills ______									
	______									
MATHEMATICS	Computational skills ______									
	Concepts ______									
	Problem Solving (Application) ______									
	Geometry ______									
	Calculator Math ______									
	Higher Order Thinking Skills ______									
	______									
LANGUAGE ARTS	Grammar ______									
	Usage ______									
	Mechanics ______									
	Foreign Language (specify: ______)									
	Composition ______									
	Higher Order Thinking Skills ______									
	______									
SCIENCE	______									
	______									
	Higher Order Thinking Skills ______									
OTHER	______									
	______									
	Higher Order Thinking Skills ______									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

- ☒ objective to be tested
- ☒ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☒ key words
- ☐ other ____________
- ☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ____________
- ☐ modified an existing taxonomy, please list ____________
- ☐ developed our own cognitive taxonomy
- ☐ other ____________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☒	☒	☐
item graphics	☒	☐	☐	☐
item statistics	☐	☒	☒	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☐ item management
- ☐ test development
- ☒ scoring
- ☒ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ____________

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using ____________
- ☒ specially designed for our system by University of Mo.
- ☐ purchased from test or research organization ____________

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items
- ☐ full-screen editing
- ☐ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other ____________

d **If your software handles test development, indicate its capabilities below:**

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ______________

e. **If your software handles scoring, please indicate its capabilities below:**

- ☐ mark sense reader
- ☒ subtest and total scores
- ☑ objective mastery
- ☒ item statistics
- ☑ test statistics
- ☐ other ______________

f. **If your software handles reporting, please indicate its capabilities below:**

- ☑ subtest profiles--student
- ☑ subtest profiles--class
- ☑ summary reports
- ☐ cross reference to materials/methods
- ☐ other ______________

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☑ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ______________

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

____

j. What is the name of your item banking/test scoring software package?

____

k. Is your software:?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

____

m. Technical assistance in running the software is

- ☐ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

ITEM BANK DATA SHEET

Pennsylvania DOE

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Pennsylvania Educational Quality Assessment

For information about the bank contact:

This is a test package not an item bank

Name Dr. Richard L. Kohr
Title Testing and Evaluation Supervisor
Organization Pennsylvania Department of Education
Street 333 Market Street
City Harrisburg State PA Zip 17126-0333
Phone: Area code 717 Number 787-4234

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this test ~~bank?~~ (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications; detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. What is the source of the ~~bank-s~~ test's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the ~~bank?~~ test (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☐ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this ~~bank?~~ test

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☒ one copy of a test	☐	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☐	☐	☒	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ______

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

CONTENT AREA		APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension		48			X	X	X		
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills		8-20			X	X	X		
	Concepts		20			X	X	X		
	Problem Solving (Application)		20-32			X	X	X		
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar		(48-64)			X	X	X		
	Usage									
	Mechanics									
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE	Life, Physical, Earth & Space		30-44			X	X	X		
	Higher Order Thinking Skills									
OTHER	See Attachment									
	Higher Order Thinking Skills									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

☐ objective to be tested
☐ item difficulty
☐ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☒ other Test booklet with all items in the content area
☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list __________
☐ modified an existing taxonomy, please list __________
☐ developed our own cognitive taxonomy
☐ other __________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

-Item text is simply a test booklet which also shows the graphic
-Item statistics are shown on a printout

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other __________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using __________
☐ specially designed for our system by __________
☐ purchased from test or research organization __________

c. If your software handles item management, indicate its capabilities below.

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other __________

d. **If your software handles test development, indicate its capabilities below:**

☐ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☐ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________

e. **If your software handles scoring, please indicate its capabilities below:**

☐ mark sense reader
☐ subtest and total scores
☐ objective mastery
☐ item statistics
☐ test statistics
☐ other ____________

f. **If your software handles reporting, please indicate its capabilities below:**

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

j. What is the name of your item banking/test scoring software package?

k. Is your software?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software?

m. Technical assistance in running the software is:

☐ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Scholastic Testing

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ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) ______

For information about the bank contact:

Name Dr. John Kauffman
Title Vice President, Marketing
Organization Scholastic Testing Service, Inc.
Street 480 Meyer Road
City Bensenville State IL Zip 60106
Phone: Area code 312 Number 766-7150

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ Rasch calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☐ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☒	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data
			other ______

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K-2 and 3-5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with any of the following content areas, please be sure to include it.

ART
PHYSICAL EDUCATION
HOME ECONOMICS
INDUSTRIAL EDUCATION
HEALTH
BUSINESS EDUCATION

MUSIC
CAREER DEVELOPMENT
CONSUMER SKILLS
BASIC LIFE SKILLS
LITERATURE
AFFECTIVE MEASURES

DRIVER'S EDUCATION
LISTENING SKILLS
SPEAKING SKILLS
CHEMISTRY
BIOLOGY
PHYSICAL SCIENCE

GOVERNMENT
CITIZENSHIP
U.S. HISTORY
WORLD HISTORY
GEOGRAPHY

	CONTENT AREA	APPROXIMATE NUMBER OF			GRADE LEVEL (AGE)					
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	1	26		X	X				
	Structural Analysis	3	23		X	X				
	Vocabulary	2	390		X	X	X	X		
	Comprehension	3	415		X	X	X	X		
	Reading Readiness									
	Reference (Study) Skills	4	550		X	X	X	X		
	Auditory Discrimination	1	28		X	X				
	Visual Discrimination	1	18		X					
MATHEMATICS	Computational skills	9	450		X	X	X	X		
	Concepts	14	100		X	X	X	X		
	Problem Solving (Application)	16	330		X	X	X	X		
	Geometry	1	36		X	X	X	X		
	Calculator Math	–	—							
	Grammar	2	150		X	X	X	X		
	Usage	1	279		X	X	X	X		
	Mechanics	3	350		X	X	X	X		
	Foreign Language (specify: ______)	–	--							
	Composition	1	90			X	X	X		
	Listening	4	37		X					

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7. Which of the following can be used to retrieve items? (Check all that apply.)

- ☒ objective to be tested
- ☒ item difficulty
- ☒ item type (e.g. multiple-choice)
- ☒ cognitive level (e.g. recall, inference)
- ☐ key words
- ☐ other ____________
- ☐ none

8. In what form are the following available? (Check all that apply.)

	HARD COPY	COMPUTER TAPE	OTHER	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

9. If computer software is used to support item banking, please answer the following questions. In each case, check all responses that apply.

a. What function(s) does this software perform?

- ☐ item management
- ☐ test development
- ☒ scoring
- ☒ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ____________

b. What is the origin of the software?

- ☒ specially designed for this system; by whom STS Research Staff
- ☐ application programs adapted from generic software (e.g., spreadsheets, data base management)
- ☐ other ____________

c. If your software handles item management, indicate its capabilities below:

- ☐ stores items
- ☐ full-screen editing
- ☐ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other ____________

d. If your software handles test development, indicate its capabilities below:

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ____________

e. If your software handles scoring, please indicate its capabilities below:

- ☒ mark sense reader
- ☒ subtest and total scores
- ☒ objective mastery
- ☒ item statistics
- ☒ test statistics
- ☐ other ____________

f. If your software handles reporting, please indicate its capabilities below:

- ☒ subtest profiles — student
- ☒ subtest profiles — class
- ☒ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____________

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☒ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____________

h. What type of computer do you use?

Honeywell

i. What general data base or other standard programs do you use in your system?

j. Is your software available for others to use or adapt?

☐ YES ☒ NO

k. What is the approximate cost of your software?

l. Is technical assistance available to help others get your software running?

☐ YES ☐ NO

10. Please provide any descriptive comments or explanatory information you wish to make about your item bank and testing systems on a separate sheet of paper.

STS Testing Program Development Process

1. Curricular outlines reviewed with District staff
2. Testing objectives selected
3. Items written to match objectives
4. Administrator's manual and other ancillary materials prepared
5. Data processing programs developed
6. Items in Steps 3, 4, and 5 reviewed, revised, and approved
7. Field testing
8. Items (with analyses) and ancillary materials reviewed, revised, and approved
9. Final test materials constructed
10. All materials printed and delivered
11. Tests administered and scored
12. Results analyzed and reported

For further information please contact:

John D. Kauffman, Ph.D.
Vice President, Marketing
Scholastic Testing Service, Inc.
480 Meyer Road
P. O. Box 1056
Bensenville, Illinois 60106
(312) 766-7150

South Carolina DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Basic Skills Assessment Program, Grades 1, 2, 3, 6, 8, and Exit Examination

For information about the bank contact

Name Vana Meredith Dabney
Title Chief Supervisor, Educational Assessment
Organization S. C. Department of Education
Street 1429 Senate Street, Room 607
City Columbia State S. C. Zip 29201
Phone: Area code 803 Number 734-8266

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☒ suggested instructional activities
- ☒ cross references between objectives and appropriate instructional materials
- ☒ content review or other validity information
- ☒ reliability estimates
- ☒ p-values
- ☒ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☒ developed by an outside organization IOX initally plus committees later
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ______

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis	1	5-26		x	x				
	Structural Analysis	1	7-22		x	x	x	x		
	Vocabulary	1	7-20		x	x	x	x		
	Contextual Word Meaning	1	11-34		x	x	x	x		
	Main Idea	1	25-100		x	x	x	x		
	Reading Readiness	18	50	x						
	Reference (Study) Skills	1	22-100		x	x	x	x		
	Higher Order Thinking Skills (Analysis of	1	54-200		x	x	x	x		
	Literature and Inference									
	Details	1	25-100		x	x	x	x		
MATHEMATICS	Computational skills (Operations)	1	29-100		x	x	x	x		
	Concepts	1	28-100		x	x	x	x		
	Problem Solving (Application)	1	23-100		x	x	x	x		
	Geometry	1	25-100		x	x	x	x		
	Calculator Math									
	Higher Order Thinking Skills									
	Measurement	1	25-100		x	x	x	x		
LANGUAGE ARTS	~~Grammar~~ Sentence formation	1								
	Usage	1	One prompt per assessment; with 7 to 35 prompts in the pool							
	Mechanics	1								
	Foreign Language (specify:)									
	Composition	1								
	Higher Order Thinking Skills									
	Handwriting	1								
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7 **Which of the following can be used to retrieve items?** (Check all that apply)

☒ objective to be tested

☒ item difficulty

☒ item type (e.g., multiple-choice)

☒ cognitive level (e.g., recall, inference)

☒ key words

☐ other ______________________

☐ none

8 **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived** (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☒ Bloom's Taxonomy

☐ other well-known cognitive taxonomy, please list ______________________

☐ modified an existing taxonomy, please list ______________________

☐ developed our own cognitive taxonomy

☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☒	☒	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☒	☒	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management

☒ test development

☐ scoring

☐ reporting

☐ student recordkeeping

☐ cross-reference to materials

☐ on-line test administration

☐ other ______________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.

☐ If you checked the above box, please list the programs you are using

☒ specially designed for our system by

Huynh Huynh
University of South Carolina

☐ purchased from test or research organization

c. If your software handles item management, indicate its capabilities below:

☒ stores items

☒ full-screen editing

☒ can add/delete/change items

☒ can add/delete/change item classifications

☒ will handle user history

☒ will handle test analysis

☐ other ______________________

d If your software handles test development, indicate its capabilities below:

☒ on-line generation of tests
☒ can use various criteria for selecting items
☒ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________

e If your software handles scoring, please indicate its capabilities below:

☐ mark sense reader
☐ subtest and total scores
☐ objective mastery
☐ item statistics
☐ test statistics
☐ other ____________

f If your software handles reporting, please indicate its capabilities below

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other ____________

g If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

h If your software has graphics capabilities, please indicate these below

☐ can generate most graphics
☒ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Mainframe

j What is the name of your item banking/test scoring software package?

South D
BSAP Test
Genator

k Is your software?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☒ not available for others

l. What is the approximate cost of your testing software?

Difficult to assess since consultant costs contains numerous other activities.

m. Technical assistance in running the software is

☐ available from us
☒ available through vendor
☐ not available

Huynh Huynh - Consultant

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

Wisconsin DPI

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Wisconsin DPI Item Bank

For information about the bank contact:

Name Dr. John H. Thoman
Title Item Bank Coordinator
Organization Wisconsin Dept. of Public Instruction
Street 125 S. Webster
City Madison State WI Zip 53707
Phone: Area code 608 Number 266-3089

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☐ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☐	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☒	☐	printing of test materials
☐	☒	☐	test scoring services
☐	☒	☐	development of individual student profiles
☐	☒	☐	development of class and school profiles
☐	☒	☐	training on test administration procedures
☐	☒	☐	training on writing or selecting objectives and item specifications
☐	☐	☐	training on writing test items
☐	☒	☐	assistance in interpreting test data

other ______

6. **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis		250			250	0	0		
	Structural Analysis		100			55	35	10		
	Vocabulary		600			200	250	100		
	Comprehension		1,200			380	550	270		
	Reading Readiness		-0-							
	Reference (Study) Skills		1,000			300	500	200		
	Higher Order Thinking Skills									
MATHEMATICS	Number & Numberation & ~~Computational skills~~ applications		690			129	410	151		
	Concepts vocabulary & symbolism		811			237	399	175		
	Measurement skills & applications		587			113	275	199		
	Geometry skills & applications		112			9	50	53		
	Calculator Math		-0-							
	Problem solving		99			38	33	28		
	Organizaing Info.skills & appl.		178			26	103	49		
	Variables & relations skills & appl.		103			2	16	85		
LANGUAGE ARTS	Grammar		750			250	250	250		
	Usage		400			100	150	150		
	Mechanics		600			200	200	200		
	Foreign Language (specify:)		-0-							
	Composition skills (machine scored only)		800			200	300	300		
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested

☐ item difficulty

☐ item type (e.g., multiple-choice)

☐ cognitive level (e.g., recall, inference)

☐ key words

☐ other ____________________

☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy

☐ other well-known cognitive taxonomy, please list ____________________

☐ modified an existing taxonomy, please list ____________________

☐ developed our own cognitive taxonomy

☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE	
item texts	☒	☐	☐	☐	
item graphics	☒	☐	☐	☐	This may change in future
item statistics	☐	☐	☐	☐	

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management

☒ test development

☐ scoring

☐ reporting

☐ student recordkeeping

☐ cross-reference to materials

☐ on-line test administration

☐ other ____________________

b. From where did you obtain this software?

☒ adapted from existing spreadsheets, databases, etc.

☒ If you checked the above box, please list the programs you are using

Current programs use Xerox Propriatory system. Use of MacIntosh Programs is under active consideration

☐ specially designed for our system by ____________________

☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

☒ stores items

☒ full-screen editing

☒ can add/delete/change items

☐ can add/delete/change item classifications

☒ will handle user history

☒ will handle test analysis

☐ other Test Construction

d. **If your software handles test development, indicate its capabilities below:**

- ☒ on-line generation of tests
- ☒ can use various criteria for selecting items
- ☒ can add/delete/change items that are computer selected
- ☒ automatically stores answer keys
- ☒ prints tests
- ☒ has special print features
- ☐ will print multiple forms
- ☐ other ______

e. **If your software handles scoring, please indicate its capabilities below:**

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ______

f. **If your software handles reporting, please indicate its capabilities below:**

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below:

Possible not done

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ______

h. If your software has graphics capabilities, please indicate these below:

- ☒ can generate most graphics
- ☐ can attach external graphics to item text New system will
- ☒ can generate graphics and merge them in with item text
- ☒ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

Xerox star 8010 consideratio
of moving to Apple
MacIntosh

j. What is the name of your item banking/test scoring software package?

______

k. Is your software:?

- ☐ available on exchange agreement
- ☒ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

______

m. Technical assistance in running the software is:

- ☐ available from us
- ☒ available through vendor
- ☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Wyoming State DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) Wyoming Clearinghouse for Basic Skills

For information about the bank contact:

Name Alan G. Wheeler
Title Administrative Assistant, Curriculum & Inst.
Organization State Department of Education
Street Hathaway Bldg
City Cheyenne **State** Wy **Zip** 82002
Phone: Area code 307 **Number** 777-6808

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☐ review to verify appropriate content
- ☒ content review to match items to objectives
- ☐ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☐ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☐	☒	☐	tests are constructed based on objectives in the item bank selected by the user
☐	☐	☒	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☒	assistance in interpreting test data

other ______

6 **Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.**

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension									
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
	Reading (General)	200	800		x	x	x			
MATHEMATICS	Computational skills	200	800		x	x	x			
	Concepts									
	Problem Solving (Application)									
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics									
	Foreign Language (specify: ______)									
	Composition									
	Higher Order Thinking Skills									
	Language Arts (including writing)	300	1200		x	x	x			
SCIENCE										
	Higher Order Thinking Skills									
OTHER	Democratic Governance	300	650		x	x	x	x		
	Free enterprise	250	500		x	x	x	x		
	Higher Order Thinking Skills									

7. **Which of the following can be used to retrieve items? (Check all that apply)**

- ☒ objective to be tested
- ☐ item difficulty
- ☐ item type (e.g., multiple-choice)
- ☐ cognitive level (e.g., recall, inference)
- ☐ key words
- ☐ other ______
- ☐ none

8. **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)**

- ☐ Bloom's Taxonomy
- ☐ other well-known cognitive taxonomy, please list ______
- ☐ modified an existing taxonomy, please list ______
- ☐ developed our own cognitive taxonomy
- ☐ other ______

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☒	☐	☐	☐
item graphics	☐	☐	☐	☐
item statistics	☐	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☐ item management
- ☐ test development
- ☐ scoring
- ☐ reporting
- ☐ student recordkeeping
- ☐ cross-reference to materials
- ☐ on-line test administration
- ☐ other ______

______

______

______

______

b. From where did you obtain this software?

- ☐ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using

______

______

______

- ☐ specially designed for our system by

______

- ☐ purchased from test or research organization

______

c. If your software handles item management, indicate its capabilities below.

- ☐ stores items
- ☐ full-screen editing
- ☐ can add/delete/change items
- ☐ can add/delete/change item classifications
- ☐ will handle user history
- ☐ will handle test analysis
- ☐ other ______

______

______

______

______

d. **If your software handles test development, indicate its capabilities below:**

☐ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☐ automatically stores answer keys
☐ prints tests
☐ has special print features
☐ will print multiple forms
☐ other ____________

____

____

e. **If your software handles scoring, please indicate its capabilities below:**

☐ mark sense reader
☐ subtest and total scores
☐ objective mastery
☐ item statistics
☐ test statistics
☐ other ____________

____

____

____

f. **If your software handles reporting, please indicate its capabilities below:**

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other ____________

____

____

____

____

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ____________

____

____

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

____

____

____

____

j. What is the name of your item banking/test scoring software package?

____

____

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____

k. Is your software:?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☐ not available for others

l. What is the approximate cost of your testing software?

____

____

m. Technical assistance in running the software is:

☐ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

SECTION C

PROPRIETARY ITEM/TEST COLLECTIONS

Alabama State DOE

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Basic Competency Tests/Alabama High School Graduation Examination (AHSGE)

For information about the bank contact

Name Dr. Anne Hess
Title Coordinator of Student Assessment
Organization State Department of Education
Street 1020 Monticello Court
City Montgomery State AL Zip 36117
Phone: Area code 205 Number 261-5241

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☑ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☒ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☒ technical reports AHSGE

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ______

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis				X	X				
	Structural Analysis				X	X	X	X		
	Vocabulary				X	X	X	X		
	Comprehension				X	X	X	X		
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
MATHEMATICS	Computational skills				X	X	X	X		
	Concepts				X	X	X	X		
	Problem Solving (Application)				X	X	X	X		
	Geometry				X	X	X	X		
	Calculator Math									
	Higher Order Thinking Skills									
LANGUAGE ARTS	Grammar				X	X	X	X		
	Usage				X	X	X	X		
	Mechanics				X	X	X	X		
	Foreign Language (specify:)									
	Composition									
	Higher Order Thinking Skills									
SCIENCE										
	Higher Order Thinking Skills									
OTHER										
	Higher Order Thinking Skills									

d If your software handles test development, indicate its capabilities below

- ☒ on-line generation of tests
- ☒ can use various criteria for selecting items
- ☒ can add/delete/change items that are computer selected
- ☒ automatically stores answer keys
- ☒ prints tests
- ☒ has special print features
- ☐ will print multiple forms
- ☐ other

e. If your software handles scoring, please indicate its capabilities below:

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other

f. If your software handles reporting, please indicate its capabilities below:

- ☒ subtest profiles--student
- ☒ subtest profiles--class
- ☒ summary reports
- ☐ cross reference to materials/methods
- ☐ other

g If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other

h. If your software has graphics capabilities, please indicate these below

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

l. What is the approximate cost of your testing software?

j What is the name of your item banking/test scoring software package?

k Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☒ not available for others

m. Technical assistance in running the software is

- ☐ available from us
- ☐ available through vendor
- ☒ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested

☒ item difficulty

☐ item type (e g , multiple-choice)

☐ cognitive level (e g , recall, inference)

☐ key words

☐ other ______________________

☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy

☐ other well-known cognitive taxonomy, please list ______________________

☐ modified an existing taxonomy, please list ______________________

☐ developed our own cognitive taxonomy

☐ other ______________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☐	☒	☐
Item graphics	☒	☐	☒	☐
Item statistics	☒	☐	☒	☐

Currently being placed on computer.

These are under our test security and are not available to outside sources.

10. If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management

☒ test development

☐ scoring

☐ reporting

☐ student recordkeeping

☐ cross-reference to materials

☐ on-line test administration

☐ other ______________________

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.

☐ If you checked the above box, please list the programs you are using

☒ specially designed for our system by ______________________

☐ purchased from test or research organization ______________________

c. If your software handles item management, indicate its capabilities below:

☒ stores items

☐ full-screen editing

☒ can add/delete/change items

☐ can add/delete/change item classifications

☒ will handle user history

☐ will handle test analysis

☐ other ______________________

Clark County, NV S.D.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnaire will be photocopied.

Item Bank Title (if any) Curriculum Master File

For information about the bank contact:

Name Alison Cawley
Title Curriculum Development Consultant
Organization Clark County School District
Street 600 North Ninth Street
City Las Vegas State Nevada Zip 89101
Phone: Area code 702 Number 799-8454

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☐ test items *
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities *
- ☐ cross references between objectives and appropriate instructional materials *
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☒ developed by state or local central office staff
- ☐ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☒ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☐ editing based on reviews by technical personnel
- ☐ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results) – some
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☐	all or most of the bank is available for sale
☐	☐	☐	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☐	pre-developed tests are constructed from the item bank
☐	☐	☐	* tests are constructed based on objectives in the item bank selected by the user
☐	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☒	☐	☐	printing of test materials
☒	☐	☐	* test scoring services
☒	☐	☐	development of individual student profiles
☒	☐	☐	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ______

* eventually will be installed on district mainframe (IBM)

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis ____									
	Structural Analysis ____									
	Vocabulary ____									
	Comprehension ____									
	Reading Readiness ____									
	Reference (Study) Skills ____									
	Higher Order Thinking Skills ____									
	____									
MATHEMATICS	Computational skills ____									
	Concepts ____									
	Problem Solving (Application) ____									
	Geometry ____									
	Calculator Math ____									
	Higher Order Thinking Skills ____									
	____									
LANGUAGE ARTS	Grammar ____									
	Usage ____									
	Mechanics ____									
	Foreign Language (specify: ____)									
	Composition ____									
	Higher Order Thinking Skills ____									
	____									
SCIENCE	____									
	____									
	Higher Order Thinking Skills ____									
OTHER	____									
	____									
	Higher Order Thinking Skills ____									

7. Which of the following can be used to retrieve items? (Check all that apply)

- ☒ objective to be tested *
- ☐ item difficulty
- ☒ item type (e.g., multiple-choice) *
- ☒ cognitive level (e.g., recall, inference) *
- ☒ key words *
- ☒ other subject, grade level *
- ☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

- ☐ Bloom's Taxonomy
- ☒ other well-known cognitive taxonomy, please list Norris Sanders
- ☐ modified an existing taxonomy, please list ____
- ☐ developed our own cognitive taxonomy
- ☐ other ____

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts *	☒	☒	☒	☐
Item graphics *	☒	☐	☐	☐
Item statistics	☐	☐	☐	☒

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

- ☒ item management *
- ☒ test development *
- ☒ scoring *
- ☒ reporting *
- ☒ student recordkeeping *
- ☒ cross-reference to materials *
- ☒ on-line test administration *
- ☒ other Curriculum revision

b. From where did you obtain this software?

- ☒ adapted from existing spreadsheets, databases, etc.
- ☐ If you checked the above box, please list the programs you are using D-Base 3 Plus Clipper
- ☐ specially designed for our system by ____
- ☐ purchased from test or research organization ____

c. If your software handles item management, indicate its capabilities below:

- ☒ stores items *
- ☒ full-screen editing *
- ☒ can add/delete/change items *
- ☒ can add/delete/change item classifications *
- ☒ will handle user history* X
- ☒ will handle test analysis *
- ☐ other ____

* eventually will be installed on district mainframe (IBM)

d If your software handles test development, indicate its capabilities below

- ☒ on-line generation of tests *
- ☐ can use various criteria for selecting items
- ☒ can add/delete/change items that are computer selected *
- ☒ automatically stores answer keys *
- ☒ prints tests *
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ______

e If your software handles scoring, please indicate its capabilities below:

- ☒ mark sense reader *
- ☒ subtest and total scores *
- ☒ objective mastery *
- ☐ item statistics
- ☐ test statistics
- ☐ other ______

f If your software handles reporting, please indicate its capabilities below

- ☒ subtest profiles -- student *
- ☒ subtest profiles -- class *
- ☒ summary reports *
- ☒ cross reference to materials/methods *
- ☐ other ______

g If your software handles student recordkeeping, please indicate its capabilities below:

- ☒ by objective mastered *
- ☒ total scores over time *
- ☒ gradebook or series of scores *
- ☐ other ______

h If your software has graphics capabilities, please indicate these below

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

AT - now

eventually mainframe

j What is the name of your item banking/test scoring software package?

Curriculum Master File

k Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☒ available for purchase from you eventually
- ☐ not available for others

l What is the approximate cost of your testing software?

Currently not determined

m Technical assistance in running the software is

- ☒ available from us
- ☐ available through vendor
- ☐ not available

11 Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems

* eventually will be installed on district mainframe (IBM)

CURRICULUM MASTER FILE

Curriculum Master File (CMF) is a computerized data base retrieval system for all of the Clark County School District learning objectives, instructional activities, and related test items (K-12). The first phase of CMF involved inputting Clark County School District's learning objectives in a host computer. This phase is completed. CMF contains elementary learning objectives (K-6) in 14 subject areas and secondary learning objectives (7-12) in over 350 courses. CMF's second phase requires the linkage of existing objectives and test items. This phase will be ongoing. Currently test items are being correlated in elementary math and reading and secondary math, reading, and English. The third phase of CMF will tie existing instructional activities and resources to established learning objectives (K-12). Teachers at school sites will also be able to input instructional activities on the mainframe for teachers at other sites.

Currently Clark County School District is converting to a new mainframe. Once the conversion is completed, Curriculum Master File will be installed on the new mainframe. Each individual school (140 schools districtwide) will be able to utilize the CMF program at their sites through modems.

At that point, CMF will include K-12 learning objectives, test items, instructional activities, and resources. The system will also have the capability to perform test scoring and record keeping functions.

Clark County School District (CCSD) is currently working with a variety of test items. We have purchased the Northwest Evaluation Association items; the Northwest Regional Educational Laboratory items; the Merrill math, reading, and language art item banks; the National Assessment of Educational Progress items; and we have developed district items in math, science, and social studies, and English.

Mississippi State U.

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) PREPS, Inc. T.I.B.

For information about the bank contact:

Name Hugh I. Peck
Title PREPS Executive Director
Organization PREPS, Inc.
Street Box 5365
City Mississippi State State MS Zip 39762
Phone: Area code 601 Number 325-3717

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☒ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☒ p-values
- ☐ IRT (latent trait) calibrations
- ☒ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☐ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☒ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☒ review for sex bias
- ☒ review for cultural and ethnic bias
- ☐ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☒ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☐	☐	☒	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☒	☐	☐	training on test administration procedures
☒	☐	☐	training on writing or selecting objectives and item specifications
☒	☐	☐	training on writing test items
☒	☐	☐	assistance in interpreting test data

other ____________

6 Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	CONTENT AREA	APPROXIMATE NUMBER OF		GRADE LEVEL (AGE)						
		OBJECTIVES	ITEMS	Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis ____									
	Structural Analysis ____									
	Vocabulary ____									
	Comprehension ____									
	Reading Readiness ____									
	Reference (Study) Skills ____									
	Higher Order Thinking Skills ____									
	____									
MATHEMATICS	Computational skills ____									
	Concepts ____									
	Problem Solving (Application) ____									
	Geometry ____									
	Calculator Math ____									
	Higher Order Thinking Skills ____									
	____									
LANGUAGE ARTS	Grammar ____									
	Usage ____									
	Mechanics ____									
	Foreign Language (specify: ____)									
	Composition ____									
	Higher Order Thinking Skills ____									
	____									
SCIENCE	____									
	____									
	Higher Order Thinking Skills ____									
OTHER	____									
	____									
	Higher Order Thinking Skills ____									

7. Which of the following can be used to retrieve items? (Check all that apply)

☒ objective to be tested
☐ item difficulty
☒ item type (e.g., multiple-choice)
☐ cognitive level (e.g., recall, inference)
☐ key words
☐ other ____________________
☐ none

8. If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived. (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it.)

☐ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________________
☐ modified an existing taxonomy, please list ____________________
☐ developed our own cognitive taxonomy
☐ other ____________________

9. In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
item texts	☐	☒	☐	☐
item graphics	☒	☐	☐	☐
item statistics	☒	☐	☐	☐

10. If computer software is used to support item banking, please answer the following questions. (In each case, check all responses that apply.)

a. What function(s) does this software perform?

☒ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☒ other ____________________
Item selection

b. From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc.
☐ If you checked the above box, please list the programs you are using
____
☒ specially designed for our system by ____________________
☐ purchased from test or research organization ____________________

c. If your software handles item management, indicate its capabilities below:

☒ stores items
☒ full-screen editing
☐ can add/delete/change items
☒ can add/delete/change item classifications
☐ will handle user history
☒ will handle test analysis
☐ other ____________________

d. If your software handles test development, indicate its capabilities below:

☒ on-line generation of tests
☐ can use various criteria for selecting items
☐ can add/delete/change items that are computer selected
☒ automatically stores answer keys
☒ prints tests
☒ has special print features
☐ will print multiple forms
☐ other ______

e. If your software handles scoring, please indicate its capabilities below:

☐ mark sense reader
☐ subtest and total scores
☐ objective mastery
☐ item statistics
☐ test statistics
☐ other ______

f. If your software handles reporting, please indicate its capabilities below:

☐ subtest profiles--student
☐ subtest profiles--class
☐ summary reports
☐ cross reference to materials/methods
☐ other ______

g. If your software handles student recordkeeping, please indicate its capabilities below:

☐ by objective mastered
☐ total scores over time
☐ gradebook or series of scores
☐ other ______

h. If your software has graphics capabilities, please indicate these below:

☐ can generate most graphics
☐ can attach external graphics to item text
☐ can generate graphics and merge them in with item text
☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

MSDOS -
IBM PC or
Clone

l. What is the approximate cost of your testing software?

not for sale

j. What is the name of your item banking/test scoring software package?

______

k. Is your software?

☐ available on exchange agreement
☐ available for purchase from vendor
☐ available for purchase from you
☒ not available for others

m. Technical assistance in running the software is:

☒ available from us
☐ available through vendor
☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.

Wash Township, IN

ITEM BANK DATA SHEET

Northwest Regional Educational Laboratory

Please type or write legibly. This questionnare will be photocopied.

Item Bank Title (if any) ______

For information about the bank contact:

(not available)

Name Isabel E. Blomberg
Title Director of Curriculum
Organization MSD Washington Township
Street 3801 E. 79th Street
City Indianapolis **State** IN **Zip** 46240
Phone: Area code 317 **Number** 845-9238

Please indicate the characteristics of this item bank by placing an "X" in the appropriate boxes.

1. Which of the following are available through this bank? (check all that apply)

- ☒ test items
- ☒ classification of items by content
- ☒ general objectives or topic statements
- ☐ item specifications, detailed content descriptions, etc.
- ☐ suggested instructional activities
- ☐ cross references between objectives and appropriate instructional materials
- ☐ content review or other validity information
- ☐ reliability estimates
- ☐ p-values
- ☐ IRT (latent trait) calibrations
- ☐ other item analysis data
- ☐ technical reports

2. What is the source of the bank's objectives and items? (check all that apply)

- ☒ developed by teachers
- ☐ developed by state or local central office staff
- ☒ developed by test development personnel within your organization
- ☒ developed by an outside organization
- ☐ collected from other sources

3. What reviews or studies (if any) were performed for the items in the bank? (check all that apply)

- ☒ review to verify appropriate content
- ☒ content review to match items to objectives
- ☐ content review to establish appropriate grade levels or age levels
- ☒ editing for clarity
- ☒ editing based on reviews by technical personnel
- ☒ editing based on technical data
- ☐ review for sex bias
- ☐ review for cultural and ethnic bias
- ☒ informal pilot testing (informal selection of subjects, small numbers of subjects, non-rigorous analysis of results)
- ☐ formal pilot testing (rigorous sampling and anlysis of results, large numbers of subjects, standardized administration)

4. Which of these statements are correct for this bank?

YES	CAN BE ARRANGED	NO	
☐	☐	☒	all or most of the bank is available for sale
☐	☐	☒	all or most of the bank is available free (or for cost of reproduction)
☒	☐	☐	pre-developed tests are constructed from the item bank
☒	☐	☐	tests are constructed based on objectives in the item bank selected by the user
☒	☐	☐	items are used to construct tests based on objectives developed by the user

5. What additional services related to the bank can be provided? (check all that apply)

YES	CAN BE ARRANGED	NO	
☐	☐	☒	printing of test materials
☐	☐	☒	test scoring services
☐	☐	☒	development of individual student profiles
☐	☐	☒	development of class and school profiles
☐	☐	☒	training on test administration procedures
☐	☐	☒	training on writing or selecting objectives and item specifications
☐	☐	☒	training on writing test items
☐	☐	☐	assistance in interpreting test data

other ______

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6. Please place "Xs" in the appropriate spaces to indicate the subject areas and grade levels covered by this item bank. Also, please use the columns on the left to indicate the approximate numbers of items and objectives available in each content area. If the appropriate content area is not listed, please write it in the space provided.

A. When specifying grade levels, place an "X" in any range where at least one grade of the range is covered. For example, if your items cover grades 2 through 4, place "Xs" in both the K–2 and 3–5 columns.

B. We do not want to limit the content of the catalog to basic skills item banks. If your item bank deals with other content areas, please be sure to include them.

C. We realize that "Higher Order Thinking Skills" items may overlap other content areas within each subject.

	See attached Obj. & performance indicators CONTENT AREA	APPROXIMATE NUMBER OF OBJECTIVES	APPROXIMATE NUMBER OF ITEMS	GRADE LEVEL (AGE) Pre School (0-4)	K-2 (5-7)	3-5 (8-10)	6-8 (11-13)	9-12 (14-17)	College	Adult
READING	Phonetic Analysis									
	Structural Analysis									
	Vocabulary									
	Comprehension					x	x	x		
	Reading Readiness									
	Reference (Study) Skills									
	Higher Order Thinking Skills									
	Totals	19	115							
MATHEMATICS	Computational skills									
	Concepts									
	Problem Solving (Application)					x	x	x		
	Geometry									
	Calculator Math									
	Higher Order Thinking Skills									
	Totals	47	168							
LANGUAGE ARTS	Grammar									
	Usage									
	Mechanics					x	x	x		
	Foreign Language (specify: ______)									
	Composition									
	Higher Order Thinking Skills									
	Totals	21	126							
SCIENCE						x	x	x		
	Higher Order Thinking Skills									
	Totals	34	204							
OTHER	Social Studies					x	x	x		
	Higher Order Thinking Skills									
	Totals	44	264							

7 **Which of the following can be used to retrieve items? (Check all that apply)**

☒ objective to be tested
☐ item difficulty
☐ item type (e g , multiple-choice)
☐ cognitive level (e g , recall, inference)
☐ key words
☐ other ____________________
☐ none

8 **If your items are retrievable by cognitive level, please indicate from where your cognitive categories were derived (If you would like to attach a listing of the taxonomy you use, we would very much appreciate it)**

☒ Bloom's Taxonomy
☐ other well-known cognitive taxonomy, please list ____________________
☐ modified an existing taxonomy, please list ____________________
☐ developed our own cognitive taxonomy
☐ other ____________________

9 In what form are the following available? (Check all that apply)

	HARD COPY	MICRO DISK	MAINFRAME DISK OR TAPE	NOT AVAILABLE
Item texts	☒	☐	☐	☒
Item graphics	☒	☐	☐	☒
Item statistics	☐	☐	☒	☒

10 If computer software is used to support item banking, please answer the following questions (In each case, check all responses that apply)

a What function(s) does this software perform?

☐ item management
☐ test development
☐ scoring
☐ reporting
☐ student recordkeeping
☐ cross-reference to materials
☐ on-line test administration
☐ other ____________________

____

____

____

____

b From where did you obtain this software?

☐ adapted from existing spreadsheets, databases, etc
☐ If you checked the above box, please list the programs you are using

____

____

____

☐ specially designed for our system by

____

☐ purchased from test or research organization

____

c If your software handles item management, indicate its capabilities below

☐ stores items
☐ full-screen editing
☐ can add/delete/change items
☐ can add/delete/change item classifications
☐ will handle user history
☐ will handle test analysis
☐ other ____________________

____

____

____

____

d. **If your software handles test development, indicate its capabilities below:**

- ☐ on-line generation of tests
- ☐ can use various criteria for selecting items
- ☐ can add/delete/change items that are computer selected
- ☐ automatically stores answer keys
- ☐ prints tests
- ☐ has special print features
- ☐ will print multiple forms
- ☐ other ____________

____

____

e. **If your software handles scoring, please indicate its capabilities below:**

- ☐ mark sense reader
- ☐ subtest and total scores
- ☐ objective mastery
- ☐ item statistics
- ☐ test statistics
- ☐ other ____________

____

____

____

f. **If your software handles reporting, please indicate its capabilities below:**

- ☐ subtest profiles--student
- ☐ subtest profiles--class
- ☐ summary reports
- ☐ cross reference to materials/methods
- ☐ other ____________

____

____

____

____

g. If your software handles student recordkeeping, please indicate its capabilities below:

- ☐ by objective mastered
- ☐ total scores over time
- ☐ gradebook or series of scores
- ☐ other ____________

____

____

h. If your software has graphics capabilities, please indicate these below:

- ☐ can generate most graphics
- ☐ can attach external graphics to item text
- ☐ can generate graphics and merge them in with item text
- ☐ can produce the entire test

i. What type of computer do you use? (If micro, please indicate XT, AT, 286, etc.)

____

____

____

____

j. What is the name of your item banking/test scoring software package?

____

____

____

____

____

____

k. Is your software?

- ☐ available on exchange agreement
- ☐ available for purchase from vendor
- ☐ available for purchase from you
- ☐ not available for others

l. What is the approximate cost of your testing software?

____

____

m. Technical assistance in running the software is

- ☐ available from us
- ☐ available through vendor
- ☐ not available

11. Please provide any descriptive comments or explanatory information about your item bank and/or testing system in this space or on a separate sheet of paper. We are especially interested in items measuring higher order thinking skills, and in computerized systems.